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**Karlinsky, Stewart Sheldon**

**COMPLEXITY IN THE FEDERAL INCOME TAX LAW ATTRIBUTABLE TO  
THE CAPITAL GAIN AND LOSS PREFERENCE: A MEASUREMENT  
MODEL**

*New York University, Graduate School of Business Administration*

**PH.D. 1981**

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COMPLEXITY IN THE FEDERAL INCOME TAX LAW ATTRIBUTABLE TO  
THE CAPITAL GAIN AND LOSS PREFERENCE: A MEASUREMENT MODEL

Stewart S. Karlinsky

A dissertation presented to the Faculty of the Graduate School of Business Administration, New York University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

COMPLEXITY IN THE FEDERAL INCOME TAX LAW  
ATTRIBUTABLE TO THE CAPITAL GAIN AND LOSS

PREFERENCE: A MEASUREMENT MODEL

STEWART S. KARLINSKY

This thesis applies content analysis to measure complexity in the federal income tax law. It describes, analyzes, and measures the specific impact of the capital gain and loss preference on the tax law's complexity. The term preference is used in its economic sense of an item being treated different than similar items.

This thesis presents an updated Adam Smith model of six criteria for a theoretically 'good' income tax: 1. Equality 2. Certain, not Arbitrary 3. Convenience of Tax Payment 4. Minimum Administrative Cost 5. Fiscal Policy Tool 6. Economic Neutrality. Within this framework the history and justifications for the capital gain and loss preference are critically analyzed.

The content analysis measurement model is applied in a two step process. First, a weighting of each income tax code section's complexity is determined by counting the number of paragraphs in the code section and its underlying regulations. Second, all 584 income tax code sections and their regulations are analyzed to determine the amount of paragraph complexity attributable to the theme, 'capital gain and loss' special treatment.

Using this complexity model, a tax expenditure/complexity (TEC) model is developed to measure relative efficiency of various tax preferences. If the TEC ratio is high, then it is an indication that the preference is efficient. If it is low, then it is an indication of inefficiency. Thus, if capital gain and loss preference yields \$12 billion a year in tax expenditures, and its complexity weight is 15%, then its TEC ratio is \$80 billion. If tax exempt bond

Abstract (2)

interest costs \$8 billion a year and its complexity is 3%, its ratio would be \$267 billion.

The findings confirm the hypothesis that the capital gain and loss preference severely complicates the income tax law in both absolute and relative terms, that it has a low TEC ratio which indicates inefficiency, and that the special treatment is not justified under an updated Smithian model.



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Stewart S. Karlinsky

August 1981

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## CHAPTER I

### Introduction

The issue of complexity in the income tax law has been paid little more than lip service in the public finance and taxation literature.<sup>1</sup> This is particularly true of the complexity attributable to the capital gain and loss preferential tax provisions,<sup>2</sup> which has been described as "singly responsible for the largest amount of complexity" in the tax law.<sup>3</sup> Recently, the problems and costs<sup>4</sup> of complexity have received increased recognition.<sup>5</sup>

This thesis describes, analyzes and presents a measure of the degree of complexity attributable to the capital gain and loss preference. The complexity caused by the capital gain and loss provisions will be assessed by using con-

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<sup>1</sup> See the New York State Bar Association Study of 1971 in Tax Law Review 27 (1972): 327; the Tax Simplification Act of 1977 P.L. 95-30; various congressional committee reports on depreciation and installment sales; Volume 34 of Law and Contemporary Problem (1969) which is devoted to complexity in the tax law, for discussions in general terms of the evils of complexity in the tax law.

<sup>2</sup> The terms 'preferential' and 'preference item' are used throughout the paper in their economic or layman's sense of an item being treated different and more favorably than other items, rather than in their Internal Revenue Code Section 57 tax definition. At this point, suffice it to say that capital gains are taxed at a significantly lower tax rate than ordinary income, while capital losses are treated less favorably than ordinary losses.

<sup>3</sup> Stanley S. Surrey, "Definitional Problems of Capital Gain Taxation", Harvard Law Review 69 (1956): 985. Since 1956, the tax law has become even more complex with the introduction of the depreciation recapture rules and other special capital gain and loss provisions.

<sup>4</sup> See for example Charles S. Lyon, "Tax Blunders: Treasury Should Reduce the Cost", Taxes - The Tax Magazine 45 (September 1967): 575.

<sup>5</sup> See Boris Bittker, "Tax Reform and Tax Simplification", University of Miami Law Review 29 (1974): 1, and Jack Schroeder's "Potential Simplification of the Federal Income Tax Law by Eliminating Special Treatment of Capital Gains and Losses", (Ph.D. dissertation, Michigan State University, 1975).

tent analysis.<sup>6</sup> A tax expenditure/complexity (TEC) model<sup>7</sup> is developed to relate the tax savings realized from a tax preference with the complexity caused by that savings in order to weigh the relative efficiency of various tax preference items. The methodology applied in this study can be extended to other tax preferences, as well as to complexities of other tax laws, e.g. estate and gift, state and local, sales and foreign taxes.

Hopefully, this thesis will pose wiser questions and cite better answers in the spirit of the statement made by the late Louis Eisenstein, a tax lawyer, "Better answers require wiser questions, ...The only meaningful questions are those which focus on the precise purpose and effects of a dispensation."<sup>(1)</sup> To focus on the precise purpose and effects of the capital gains dispensation, an updated Adam Smith model of a theoretically 'good' income tax will be used in this chapter to analyze some arguments for the special treatment accorded capital gains and losses. The complexities in the tax system which are due to the capital gain and loss provisions are identified in Chapter II. Chapter III develops a complexity measurement model based on content analysis which is currently utilized in communications, psychology and education research. This model is applied to the capital gain and loss provisions in Chapter IV, and the results are utilized to develop a tax expenditure/complexity (TEC) measure in Chapter V. The implications of the study, as well as future research opportunities, are presented in the concluding chapter.

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<sup>6</sup> See Bernard Berelson, Content Analysis in Communication Research, (New York: Free Press Publication, 1952), and Thomas F. Carney, Content Analysis - A Technique for Systematic Inference from Communications, (Winnipeg, Canada: University of Manitoba Press, 1972).

<sup>7</sup> Tax expenditure is a concept developed by Stanley S. Surrey in 1967 and elaborated on in his book Pathways to Tax Reform. It is now part of the Congressional Budget Office's annual reporting. Surrey defines tax expenditures as special exemptions, exclusions, deductions, credits, and other tax benefits which are methods of providing government financing. See also Tax Expenditures - A Primer, U.S. General Accounting Office, Publication 80-26 (1979).

## Smithian Model, History and Justifications of Capital Gain and Loss Treatment.

Adam Smith, in his classic economic treatise, The Wealth of Nations(2), proposed four criteria for a theoretically good income tax. Such a good tax should:

1. Result in Equality of Taxation,
2. Be Certain, Not Arbitrary,
3. Maximize the Convenience of Tax Payment, and
4. Minimize Administrative Costs.

Other economists have added two other criteria.<sup>8</sup> It should:

5. Serve as a Fiscal Policy Tool and
6. Be Economically Neutral.

It should be noted that many of these criteria, especially Equality and Minimized Administrative Costs, Economic Neutrality and Fiscal Policy Tool, are inherently conflicting. A conscious political, social or economic weighing, including the degree of complexity involved, should be made where these criteria clash.

### I.1 Equality of Taxation

Tax equality can be considered in terms of both horizontal and vertical equity. Horizontal equity is the "requirement of equal taxes for people of equal positions", while vertical equity is the "proper pattern of unequal taxes among people with unequal positions".<sup>9</sup> These concepts are easier to define than to implement as it is not clear what criterion or combination of criteria defines equality (income, consumption, wealth, utility, circumstances).

How do the capital gain and loss provisions satisfy the equality criter-

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<sup>8</sup> See Richard Musgrave and Peggy Musgrave, Public Finance in Theory and Practice, 2nd edition (New York: McGraw Hill, 1976), p. 210; Joseph A. Pechman, Federal Tax Policy (Washington, D.C.: Brookings Institution, 1977), p. 5; U.S. Department of Treasury, Blueprints for Basic Tax Reform (January 17, 1977), p. 1.

<sup>9</sup> Musgrave and Musgrave, Public Finance, p. 216, and Martin David, Alternative Approaches to Capital Gains Taxation (Washington, D.C.: Brookings Institution, 1968), p. 53.

ion? Advocates of the present favored treatment (or the more extreme position that all capital gains should be exempt from tax) argue from the global horizontal equity viewpoint, exemption or special treatment is appropriate, because many foreign countries<sup>10</sup> exempt from taxation capital gains on property held for investment purposes. (See Tables 1 and 2 for a comparison of the U.S. and nine other major industrialized foreign countries' treatment of individual and corporate capital gains.) However, few of our tax rules are consistent with other countries', so global horizontal equity does not appear to be an acceptable tax criterion. Furthermore, as Table 1 shows, treatment of business gains is more preferentially treated in the U.S. than in foreign countries, and other than stocks and securities, U.S. treatment of individuals is often less onerous than foreign treatment.

Another basic contention is that capital gains are not income,<sup>11</sup> and therefore, logic would dictate that it should not be taxed. The fact that in

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<sup>10</sup> See A.R. Ilersic, The Taxation of Capital Gains (London: Staples Press, 1962) for the British and United States treatment compared; Lawrence Seltzer, Nature and Tax Treatment of Capital Gains and Losses (New York: National Bureau of Economic Research, 1951), and Henry Simons, Personal Income Taxation (Chicago: University of Chicago Press, 1938) for various foreign countries' tax treatment. The above cites predate the 1970's so Tables 1 and 2 were prepared from Price Waterhouse, Worldwide Summary of Corporate Taxation (October 1980) and various Arthur Andersen Tax and Trade Guides and Pocket Guides to European Individual and Corporate Taxes. It is interesting to note that with regard to corporate treatment of capital gains, the U.S. treatment is no more onerous than foreign treatment and in a significant number of situations, the treatment is more beneficial.

<sup>11</sup> For purposes of this study, I will sidestep the issue of the proper tax base, income or consumption. I will take as given the U.S. income tax system being a quasi-income based one. (The same basic assumption is made in arriving at the tax expenditure concept discussed in footnote 7.) For a good overview of the tax definitions and application of these two competing theories, see Joseph A. Pechman, Comprehensive Income Taxation (Washington, D.C.: Brookings Institution, 1977) Chapter I; Pechman, Federal Tax Policy, pp. 66-68 and Chapter 6; and Pechman, What Should Be Taxed: Income or Expenditure? (Washington, D.C.: Brookings Institution, 1980). For pro consumption based theory, see Thomas Hobbes, Leviathan, Chapter XXX (1651); Nicholas Kaldor, An Expenditure Tax (1955); Irving Fisher, "Income in Theory and Income Taxation in Practice", Eco-



TABLE 1

## INDIVIDUAL CAPITAL GAIN TREATMENT BY 10 INDUSTRIALIZED NATIONS USING THE U.S. AS A BENCHMARK

COUNTRIES FACTORS	Australia	Austria	Belgium	Canada	France	W. Germany	Japan	Sweden	U.K.	U.S.
Highest Individual Tax Rate - Regular	more favorable	more favorable	less favorable	more favorable	more favorable	more favorable	less favorable	less favorable	less favorable	70%
Highest Individual Tax Rate - Capital Gain	more favorable	more favorable	less favorable	more favorable	more favorable	more favorable	less favorable	less favorable	less favorable	28%
Definition of Capital Asset	less favorable	less favorable	same	same	same	less favorable	same	same	less favorable	Section 1221 - Liberal
Gain on Business Asset	more favorable	less favorable	less favorable, if held less than five years, more if held more than 5	more favorable	same	less favorable	less favorable	less favorable (unless held more than four years)	less favorable	Section 1231 - treated as Capital Gain
Gain on Investment Assets - Stocks and Securities	more favorable (unless intended for resale at a profit)	more favorable	more favorable	more favorable	less favorable (unless owned more than ten years)	more favorable	more favorable	less favorable	more favorable	Capital Gain
Gain on Investment Assets - Non-stock	more favorable (unless intended for resale at a profit)	more favorable (except real estate)	less favorable, if held less than five years, more if held more than 5	more favorable	less favorable (unless owned more than ten years)	more favorable	less favorable	less favorable	less favorable	Capital Gain
Short-term/Long-term Dividing Line	same	same-stock less-R.E.	less favorable (five years)	more favorable	less favorable	more favorable (six months)	less favorable (five years)	less favorable (two years)	less favorable	One Year

SOURCES: Arthur Andersen &amp; Co. - Tax and Trade Guide

Arthur Andersen &amp; Co. - Pocket Guide to European Taxes (1980)

Arthur Andersen &amp; Co. - Subject File 1220/32 - Summary of Individual Taxation of Long-term Capital Gain and Short-term Capital Gain on Portfolio Stock Investments in Industrial Countries - 1980

TABLE 2

## CORPORATE CAPITAL GAIN TREATMENT BY 10 INDUSTRIALIZED NATIONS USING THE U.S. AS A BENCHMARK

FACTORS	Australia	Austria	Belgium	Canada	France	W. Germany	Japan	Sweden	U.K.	U.S.
Highest Corporate Tax Rate - Regular	same	less favorable	less favorable	same	less favorable	less favorable	more favorable	less favorable	less favorable	46%
Highest Corporate Tax Rate - Capital Gain	more favorable	less favorable	more favorable	more favorable (50% of gain is excluded)	more favorable	less favorable	less favorable	less favorable	less favorable	28%
Definition of Capital Asset	less favorable	less favorable	less favorable (must hold five years)	same	same	less favorable	less favorable	same	same	Section 1221 Liberal - Includes Stocks, R.E., Business Assets, Speculating, Investments, etc.
Gain on Business Assets	more favorable	less favorable	more favorable (if held five years)	more favorable	more favorable if not distributed to shareholders	less favorable	less favorable	less favorable	same	Section 1231 Treated as Capital Gain
Gain on Investment Assets	less favorable (if intended for sale)	less favorable	more favorable (if held five years)	more favorable	more favorable if not distributed to shareholders	less favorable	less favorable	stocks - more favorable R.E. - less favorable	same	Section 1221 Treated as Capital Gain
Depreciation Recapture Concept	same	same	more favorable (if held five years or more)	same	same	same	same	same	same	Sections 1245 and 1250: Depreciation Recapture Converting Capital Gain back to Ord. Inc.
Short-term/Long-term Dividing Line	same	less favorable	less favorable (five years)	more favorable	less favorable (two years)	less favorable	less favorable	less favorable (two to five years)	more favorable	One Year

SOURCE: Price Waterhouse &amp; Co. - Corporate Taxes: A Worldwide Summary (October 1980)

the U.K. capital gains are defined as accretions to capital and are tax exempt,<sup>12</sup> and that under U.S. trust and property rules capital gains may be designated as corpus, is cited as support for this contention. The fruit and the tree analogy is also frequently cited in support of this view. The fruit represents annual income, but the tree (capital and its appreciation) is not income and should go untaxed or else the annual yield will diminish. This argument violates the horizontal equity criterion. If one investor owns a growth stock and another investor owns an income stock which will yield the same (in present value terms) over time, why should the first investor's tax be less than the second's? The growth increment (if recognized at all) will be taxed as capital gain (40% of appreciation) while the income increases will be treated as ordinary income (taxable at 100%).

A view more commonly held in the U.S. is that capital gains are income and that both horizontal and vertical equity considerations are satisfied if the proper measure of taxable income is 'economic power' (defined as the ability to consume rather than actual consumption). This is the heart of the Haig-Simons-Schanz income definition "consumption plus change in net worth". Under this income concept, not only should capital appreciation be taxed, but

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nometrica 5 (1937), p. 1, and his Constructive Income Taxation: A Proposal for Reform; William D. Andrew, "A Consumption Type or Cash Flow Personal Income Tax", Harvard Law Review 87 (1974): 1113; and Blueprints for Basic Tax Reform. For pro income based theory, see Robert Murray Haig, The Concept of Income-Economic and Legal Aspects in the Federal Income Tax, (New York: Columbia University Press, 1921), p. 7; Henry C. Simons, Personal Income Taxation, (Chicago: University of Chicago Press, 1938); George Schanz, Der Einkommensbegriff Und Die Einkommensteuergesetzliche, (Finanz-Archiv, 1896) Volume 13, pp. 1-8; Richard Goode, The Superiority of the Income Tax Over the Expenditure Tax, Brookings Institution Conference 10/19-20/78; Henry Aaron, "What is a Comprehensive Tax Base Anyway?", National Taxation Journal 22 (1969) 543.

<sup>12</sup> It should be noted that the U.K. definition of capital assets is more limited than the U.S. version. See Haig's series of Wall Street Journal articles (3/23, 3/25, 3/29, 4/2, 4/8, 4/13, 1937) and Tables 1 and 2. Also, since the mid-70's, capital gains are generally taxable in England.

its timing should be on a realization basis,<sup>13</sup> rather than a sale or exchange basis.

Another argument often asserted against taxing capital appreciation is that it is due to a change in interest rates, and if the assets sold were reinvested in similar assets, the investor would receive the same return, only in the absence of a tax. With a tax on the sale or exchange, the yield would be diminished. This is just a sub-argument of the general rule that taxes are a disincentive. Why distinguish bonds from any other income, earned or unearned? The inverse of this return argument is that the interest and capital gains are two parts of the same return, so under the horizontal equity criterion why should they be taxed differently? Further, vis a vis a fixed income account (savings account or Series E bond) you are better off. Granting favorable tax treatment for a better off position is reverse vertical equity and plainly inconsistent with the equality criterion.

Under the equality criterion it is asserted that an asset's value is derived from its expected income and this income will be subject to tax when received; so taxing the income and the market value change is double taxation.<sup>14</sup>

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<sup>13</sup> Haig-Simons-Schanz's model of income requires a valuation of assets on an annual basis so as to determine consumption plus change in net worth. Thus, realization on capital gains (losses) would be the positive (negative) difference between FMV at year-end and FMV at the beginning of the year. In this study, we will not examine the pros and cons of the realization basis. It should be noted that it is not part of our current tax system primarily due to the compliance cost of valuation (criterion #4) and the inconvenience of paying tax with no cash generated (criterion #3). It should be noted that for accounting purposes the concept of realization is used in a very different context than as defined above. In fact, accountants view realization on a sale or exchange basis.

<sup>14</sup> The double taxation concept is basically that if \$1 is earned and invested, it is taxed when earned and the yield from the \$1 is again taxed. If it were earned and spent (consumed), it would be taxed only once. Thus, it is argued that our income based system is biased against savings. Note that capital gain treatment only affects one segment of savings at the expense of other savings forms.

This argument is part of the broader nonconsumption income versus consumption income tax system controversy (see footnote 11). Since our tax system is primarily income based and all nonconsumption income is double-taxed, why distinguish capital gains from other nonconsumption income? Such a distinction is a clear violation of horizontal equity.

Another reason often cited for special treatment of capital gains is that the gain, though realized over several years, is taxed all in one year.<sup>15</sup> Given our progressive marginal tax rates, this might result in a higher tax than if a realization basis was in effect. Several observations should be made on this issue. The decision of when and how much to sell is made at the discretion of the seller, and market conditions. It should be noted that, in effect, the taxpayer who controls the timing has an interest-free loan from the government on the tax that would be due on a realization basis. Further, if the property is held until death or gifted, the gain may be indefinitely or permanently postponed. A planned sale when the taxpayer is in a lower marginal tax bracket is another factor often ignored. In effect, the taxpayer has the option of selling on a realization or recognition basis. Income averaging under its current provisions (Sec. 1301) or in some modified form could be used to alleviate the horizontal equity problem associated with 'bunching', without introducing the complexity that capital gain and loss special provisions have generated. Interestingly, corporations are taxed on an essentially proportion-

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<sup>15</sup> This is not necessarily true since installment sales and deferred sales treatment is available for many transactions, depending on the method of payment. When capital gains and installment sales treatment applies to the same transaction, you have the bunching criteria being doubly applied. Furthermore, a one-year holding period (previously it was nine or six months) wouldn't reflect significant accumulation over time. The proposed 1981 tax law change might reduce the holding period length back to six months.

al basis<sup>16</sup> so no extra tax is incurred because of a realization or recognition basis. Yet the capital gains special provisions also apply at the corporate level.

The application of the equality criterion to the capital loss provision has been given much less emphasis in the tax literature. Theoretical considerations have received less emphasis because of the potential revenue drain of an unlimited loss deduction coupled with the investor's discretion as to timing of losses (sooner) and recognition of gains (later).

This potential loss of revenue problem deserves more analysis. Little empirical evidence of the affect of unlimited loss provisions is available. It would be interesting to compare periods of no limitation with periods of limited loss. Unfortunately, the only suitable periods were between 1917 and 1933, and market conditions today may be significantly different. The data is nevertheless interesting. During 1917-1921, capital losses could be fully deducted against ordinary income while in 1922-1933 only limited deductions could be taken. The annual average total capital loss varied moderately with the change in the law.(3) The average annual loss between 1917 and 1921 was \$661 million and \$837 million between 1921 and 1933. The recognized loss between uniform loss treatment periods varied to a greater extent than the recognized loss in different treatment periods. The range of losses was \$70 million to \$1,102 million in 1917-1921; \$213 million to \$1,815 million in 1922-1933. This would seem to indicate that forces other than capital loss treatment were operating.

The equity criterion calls for similar treatment between capital gains and capital losses. In Figure 1 a comparison of the capital gain and loss results are presented under an economic realization and recognition basis. We

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<sup>16</sup> The corporate tax rate on all taxable income above \$100,000 is 46%. The alternative tax on capital gains is 28%.

assume a progressive marginal tax rate and consistently high regular (non-capital gain) income over time.

### FIGURE 1

#### REALIZATION VS. RECOGNITION

	<u>Capital Gains</u>	<u>Capital Losses</u>
<u>Realization</u> <u>Basis</u>	lower tax cost	higher tax benefit (skims the highest rates each year)
<u>Recognition</u> <u>Basis</u> (Bunching)	higher tax cost	lower tax benefit (it would absorb lower tax rates in year recognized)

Under our current recognition system, the higher tax due to bunching is used as the justification for the special gain provisions. In effect, it puts the taxpayer on a quasi-realization basis. But the higher tax benefits available to a taxpayer from a loss when he sells at his discretion (on a quasi-realization basis) is considered a bad and, therefore, limitations are imposed. Somehow this treatment seems incongruent and inequitable.

From the viewpoint of equality, it would appear that capital losses should be treated the same as ordinary losses, capital gains should be treated the same as ordinary gains and capital gains and losses should be treated the same. Therefore, it is clear that the special treatment of capital assets is not supported or justified by the equality of taxation criterion.

#### I.2 Taxes Should Be Certain, Not Arbitrary

Smith was willing to give up a considerable amount of equality for certainty and nonarbitrariness. Certain and not arbitrary means that the tax consequences are fully known and knowable because the law is clear and the dividing lines are not arbitrary. This criterion is seriously violated. The

complexity, arbitrariness and uncertainty of capital gains provisions is illustrated by the fact that it is crucial to distinguish between an investor and a dealer; a Northern Pine tree and a Southern Pine tree; a copyright and a patent; a sale and a distribution; a business and non-business bad debt. All of these distinctions are necessarily uncertain, arbitrary and subjective.

The history of capital gains and losses reflects constantly changing treatment. Permanence is another measure of certainty. A rule should be fairly constant so that a taxpayer might be confident that treatment will be similar over time. Unfortunately, this has not been true in the capital gains area.

Throughout the modern income tax period in the U.S. (1913-1980), the treatment of capital gains and losses has been highly variable<sup>17</sup> (see Tables 3 - 6). Basically, a long-term capital gain has been taxed in three different ways: 1. It has been taxed as ordinary income at ordinary rates; 2. As ordinary income at special rates; 3. As a percentage of the income at ordinary rates. Presently, 40% of the gain from the sale or exchange of a capital asset held by an individual over twelve months is subject to the regular income tax rates (treatment under alternative 3 above). For corporations, the full qualified gain is taxed at a maximum special rate of 28% (treatment under alternative 2 above).

The treatment of capital losses has also varied. Basically, a long-term capital loss: 1. has not been deductible at all (against ordinary income and/or capital gains); 2. has been fully deductible against ordinary income or capital gains; 3. has been partially deductible against ordinary income. Cur-

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<sup>17</sup> See Anita Wells, "Legislative History of Treatment of Capital Gains Under Federal Income Tax 1913-1948", National Tax Journal 2 (1949): 12; U.S. Secretary of Treasury, Federal Income Tax Treatment of Capital Gains and Losses (1951); and Seltzer, Nature and Tax Treatment.



TABLE 3

## HISTORICAL TREATMENT OF LONG-TERM CAPITAL GAINS - INDIVIDUALS

	1913-1921	1922-1933	1934-1937	1938-1941	1942-1968	1969-1977	1978--
1 - Amount of Gain Included in Income	100%	100%	30 - 100% depending on holding period	30 - 100% depending on holding period	50%	50%	40%
2 - Tax Rate on Includible Amount	1 - 77%	12½% maximum	4 - 79%	15 + 20% ceiling, 30% alt. tax rate	50% alternative tax rate	50 - 70% alt. tax rate	14 - 70% alt. tax rate repealed
3 - Tax Rate Range on Ordinary Income	1 - 77%	1 - 63%	4 - 79%	4 - 81%	14 - 94%	14 - 77%	14 - 70%
4 - Income Averaging Available	—	—	—	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes
5 - Holding Period	—	2 years	1 - 10 yrs.	18 mos.-10 yrs.	6 months	6, 9 mos., 1 yr.	1 year
6 - Special Provisions	—	—	—	—	Introduction of Depreciation Recapture Rules	Minimum Tax on Capital Gain (10-15%)	Eliminated Minimum Tax on C/G and Instituted Alt. Min. Tax

## NOTES:

1. Tax rate high and low is not necessarily for the same year.
2. Income averaging did not cover capital gains. Averaging period was either 3 or 5 prior years.

TABLE 4

## HISTORICAL TREATMENT OF LONG-TERM CAPITAL GAINS - CORPORATIONS

	1913-1921	1922-1933	1934-1937	1938-1941	1942-1968	1969-1977	1978 —
1 - Amount of Gain Included in Income	100%	100%	100%	100%	100%	100%	100%
2 - Tax Rate on Includible Amounts	1 - 12%	12 - 14%	8 - 15%	12.5 - 44%	Alternative Tax of 25%	Alternative Tax of 25%, 30%	Alternative Tax of 28%
3 - Tax Rate Range on Ordinary Income	1 - 12%	12 - 14%	8 - 15%	12.5 - 44%	21 - 53%	20 - 53%	17 - 46%
4 - Income Averaging Available	—	—	—	No	No	No	No
5 - Holding Period	—	—	—	—	6 months	6, 9, 12 mos.	12 months
6 - Other Special Provisions	—	—	—	—	Introduction of Depreciation Recapture Rules	Minimum Tax on C/G May Apply (10-15%)	

NOTE 1: Tax rate high and low is not necessarily for the same year.

TABLE 5

## HISTORICAL TREATMENT OF LONG-TERM CAPITAL LOSSES - INDIVIDUALS

	1913-1921	1922-1933	1934-1937	1938-1941	1942-1968	1969-1977	1978 -
1 - Amount of Loss Deductible	None, then against C/G, 100% against ord. income	Fully, then 12½% rate	Net Capital Loss against \$2,000 ordinary income	Only against C/G	Net Capital Loss against \$1,000 ord. income	50% of Net Capital Loss against \$1,000 ord. income	50% of Net Capital Loss against \$3,000 ord. income
2 - Tax Rate Range on Capital Gains	1 - 77%	12½% max.	4 - 79%	15 & 20% ceiling, 30% alt. tax rate	50% alternative tax rate	50 - 70% alternative tax rate	14 - 70%
3 - Tax Rate Range on Ordinary Income	1 - 77%	1 - 63%	4 - 79%	4 - 81%	14 - 94%	14 - 77%	14 - 70%
4 - Holding Period	—	2 years	1 - 10 yrs.	18 mos. - 10 years	6 months	6, 9, 12 mos.	12 months
5 - Carryover Rules	—	—	—	—	5 yr. carryforward, unlimited (until death) carryforward	unlimited carryforward	unlimited carryforward

TABLE 6

## HISTORICAL TREATMENT OF LONG-TERM CAPITAL LOSSES - CORPORATIONS

	1913-1921	1922-1933	1934-1937	1938-1941	1942-1968	1969-1977	1978 --
1 - Amount of Loss Deductible	100%	100%, \$2,000 loss against ord. income	\$2,000 loss against ord. income	100%	No offset against ord. income	No offset against ord. income, ltd. to C/G	Limited to C/G
2 - Tax Rate on Capital Gain	1 - 12%	12 - 14%	8 - 15%	12.5 - 44%	25% max.	25, 30% max.	28% max.
3 - Tax Rate Range on Ordinary Income	1 - 12%	12 - 14%	8 - 15%	12.5 - 44%	21 - 53%	20 - 53%	17 - 46%
4 - Holding Period	--	--	--	--	6 months	6, 9, 12 mos.	12 months
5 - Carryover Rules	--	--	--	--	5 year carryforward	3 yr. carryback, 5 yr. carryforward	3 yr. carryback, 5 yr. carryforward

rently, individuals may reduce ordinary income by a net capital loss to the extent of \$3,000 per year. A carryforward is available for an extended period of time (treatment under alternative 3). For corporations, no offset against ordinary income is available (current, past or future) and a three-year carry-back and a five-year carryforward is allowable against capital gains (a modified alternative 2 treatment).

Since capital gains and losses are treated different than ordinary income and losses (as well as different than each other), a prudent man would try to structure a given transaction so as to produce long-term capital gains rather than short-term capital gains or ordinary income; and ordinary loss rather than long-term or short-term capital loss. This has led to a great deal of complexity in our tax law, adding to the uncertainty and thus, violating Smith's criterion of certainty and not arbitrary.

### I.3 Tax Payments Should Be Convenient

Adam Smith, as well as present day politicians and economists, felt that it was important that tax payments should be convenient, i.e. taxpayers should have the wherewithal to pay the tax. This is part of the rationale for our pay-as-you-go withholding and estimated tax rules. The like kind exchange (I.R.C. Section 1301), involuntary conversions (Section 1033), sale of residence (Section 1034), and reorganizations (Sections 351 and 368) rules have all been justified on this basis. Even though there is an economically realized gain, there is no cash to pay for the tax on the realized gain. The tax is postponed until there is a sale, exchange or disposition that will provide funds to pay the tax due.

The same convenience of payment rationale has been applied to the capital asset tax treatment. If we taxed capital gains on a realization basis (see

footnote 13), as Henry Simons often advocated, we would be violating this criterion. A taxpayer would pay on a paper gain but would not have any negotiable paper generated to pay for it. This reasoning, plus the discussion of subchapter I.4 below, justifies maintaining the recognition basis. However, it in no way justifies the special capital asset treatment that has existed since 1921. When a gain is postponed under the recognition rules, the taxpayer has the benefit of an interest-free loan from the government and the rationale of an additional tax benefit on the sale or exchange of a capital asset is hard to justify under the convenience criterion.

The convenience argument does not seem relevant to capital losses. The convenience of payment argument justifies the recognition basis for gains and losses, but it does not justify the special favorable treatment of capital gains, nor the negative preferential treatment accorded capital losses.

#### I.4 Tax Law Should Minimize Administrative Costs

Adam Smith argued that a good income tax system requires minimum cost of collection and any collection cost certainly must include costs of compliance. The capital gain and loss provisions have added tremendous administrative, judicial and compliance costs as described in Chapters II, III and IV. This cost is primarily attributable to the complexity that the capital asset provisions introduce in the tax law. Complexity leads to a lack of comprehensibility by the taxpayer and the government, and involves a tremendous expenditure of energy in a non-productive direction.

The recognition basis of taxing capital transactions is properly justifiable under the compliance cost argument. Valuation of the taxpayer's assets every year and the cost of governmental verification would impose a tremendous administrative burden on both the taxpayer and the government. As previously

discussed, justifying the recognition basis in no way justifies the preference for capital transactions, especially when the preference adds so greatly to the administrative costs. As Chapters II, III and IV demonstrate, the existing preference is not only unjustified, but it seriously violates the minimum administrative cost criterion.

None of the four criteria originally presented by Adam Smith, justify preferential capital gain and loss treatment. Indeed, all to a greater or lesser degree can be used to argue against the capital asset preference. In addition to the Adam Smith criteria, it has been urged that a good income tax should reflect a fiscal policy tool and economic neutrality criteria.

#### I.5 Fiscal Policy Tool

The government often uses taxes as a fiscal policy tool to encourage or discourage economic activity. Because it was thought socially desirable to increase oil and gas exploration, percentage depletion rules were adopted; to encourage investment in certain equipment, the government enacted investment tax credit rules; to encourage domestic corporations' selling overseas, it instituted domestic international sales corporation (DISC) rules; to discourage certain boycott-type behavior by domestic corporations, the government enacted Code Section 999; to discourage the razing of historical structures, Congress enacted legislation penalizing the demolition of historic sites (Section 280B). Taxes are often discussed in the economics literature as an important and vital stabilizing influence on the economy. Basically, when the economy is in a period of prosperity, the income taxes will take some of the steam out of the system (economic drag). Conversely, when the economy is in a recession, transfer payments and the tax system (allowance of losses, net operating loss, carrybacks, etc.) allow for a speedier recovery.

The potentially most compelling justification for the capital gain and loss special treatment is that it encourages capital formation and investment. There might be a need for incentives to encourage risky ventures, innovation and new investments in order to maintain or improve the standard of living for future generations, to compete in world markets and to increase productivity. It is argued that our income-based tax system discourages savings by double taxing it (see footnote 14) and that capital gain treatment is needed to offset this bias against nonconsumption income. The question naturally arises, why a preference should be given to capital gains and not to other nonconsumption income, such as rents, royalties, interest, dividends, and others? A further question is, how do you distinguish investment from speculation? The holding period concept (currently one year) is an ineffective method of distinguishing between the two. Capital gain and loss provisions may also result in portfolio changes rather than encourage new investment. Many of the capital transactions that occur are merely a change in investment mix. In the 1970's, an average of 1% of Gross National Product was raised for new shares in the equity market.(4) Is this sufficient justification to complicate the tax system by 15%?(5) One might argue that the special provisions are essential to maintain liquidity and encourage the market for investments, but what are the costs in terms of complexity and are there more efficient measures available? A general tax reduction, made possible by the elimination of the capital gain preference,<sup>18</sup> might induce the desired behavior without so much complexity. This possibility will briefly be presented in Chapter VI.

Much of the investment in the U.S. is undertaken by tax exempt organi-

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<sup>18</sup> In 1977, the capital gain tax preference was \$8.12 billion. (See Joseph Pechman, Federal Tax Policy, 3rd ed., p. 354.) In fiscal 1980, the preference was \$11.73 billion (see Figure 3, p. 76).



zations (pension plans, charitable organizations, foundations, and government funds) with 1979 assets in excess of \$600 billion, which are unaffected by the capital asset's special provisions. Additionally, much investment is generated by banks, insurance companies and other financial intermediaries which are taxed at a relatively low effective tax rate and thus, unaffected by the preference. To the extent that these organizations are involved in the capital formation and investment process, the justification for the capital gain and loss preference as a fiscal policy tool is significantly diluted. In 1980, the value of American corporations' publicly traded stock was \$1.1 trillion while public and private pension plans (without taking into account charitable organizations, foundations, government funds, banks, insurance companies, etc.) had \$609 billion to invest of which \$372 billion were invested in stocks and bonds.(6) By comparison, in 1979 eighty-one companies sold stock for the first time raising \$506 million.(7) By adopting specific measures such as the Paris Bourse experiment,<sup>19</sup> the government might encourage new investments from a larger segment of the population without the attendant complexity of the current capital gain and loss provisions.

The encouragement of risk-taking is not facilitated by our current tax system where capital losses are severely limited.

The capital gains provisions only affect a relatively small percentage of the taxpayers in any given year.(8) In 1970, 93% of all individual returns reported no net gain from the sale of capital assets. Of the remaining 7%, a majority were on returns with adjusted gross income above \$30,000. In 1973,

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<sup>19</sup> Tax deductions or credits were used to encourage specific new investments. See Wall Street Journal, May 5 and June 4, 1980, and Business Week, September 1, 1980, p. 67 for a discussion of other countries' methods of encouraging savings and investment.

7.4 million out of 81 million individual returns filed (9%) reported some capital gain or loss from the sale of a capital asset.<sup>20</sup> Yet 65% of all code sections are impacted in some way by the capital gain and loss special provisions.<sup>(9)</sup> In both absolute and relative terms, the higher the income, the more benefits from the special preference.<sup>21</sup> As a matter of fact, one analysis showed that the preference made the tax system regressive between the \$500,000 - \$1,000,000 (36% effective tax rate) and over \$1,000,000 adjusted gross income (34% effective tax rate).<sup>(10)</sup> This type of analysis led to an assertion by Stanley Surrey, "Not taxing capital gains as income under an income tax is very much like not taxing expenditures on luxury goods under a consumption tax."<sup>(11)</sup> Admittedly, the 7% or 9% of individual taxpayers may be different individuals in different years. Given that in 1970 only one out of a hundred individual returns filed showed a capital gain exceeding \$1,500, it is incredible to introduce the amount of complexity that this special provision does for so small a segment of the population.<sup>(12)</sup>

The empirical impact of the preference on an investor's decisions has never been fully tested, especially when coupled with lower overall tax rates. Two studies tried to gauge its effect.<sup>(13)</sup> Both studies concluded that taxes have an effect on investment decisions, but that other factors are more import-

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<sup>20</sup> See U.S. Department of the Treasury Publications 458 (November 1980), Sales of Capital Assets Reported on Individual Income Tax Returns - 1973. The total gross capital gains for 1973 were \$50.5 billion and gross losses were \$15.4 billion. Corporate stock sales were reported on 2.5 million returns (out of 7.4) and showed \$13.1 billion gains and \$8.0 billion in losses.

<sup>21</sup> For 1972, for AGI      under \$50,000      less than 8% of income was from C/G.  
                          "      100,000 - 500,000    less than 19.4% of income was from C/G.  
                          "      500,000 - 1,000,000   less than 43.7% of income was from C/G.  
                          "      over 1,000,000      less than 58.1% of income was from C/G.

Sources: Musgrave, Public Finance, pp. 241-248  
Jerome Hellerstein, Taxes, Loopholes and Morality, (New York: McGraw Hill, 1963) p. 43, shows that in 1959, taxpayers with AGI of 50,000 or greater (3% of taxpayers) received 36% of net LTCG income.

ant. They conclude that capital gain treatment has an impact on the mix of investment, but neither study shows that the magnitude of investment is affected. In other words, capital gain provisions do influence the choice among investment alternatives, but they may not affect the total pool of savings. If the special provisions only affect the mix of investments and not the magnitude, then its justification as a fiscal policy tool is considerably reduced.

Under the guise of a fiscal policy tool, present capital gain and loss treatment has been justified to unlock the 'lock-in' effect. There are several aspects of the lock-in effect that should be discussed. It is asserted that taxpayers who have an economic gain have an incentive not to sell because of the tax consequences, even if better alternative investments may be available. This leads to a less than optimal portfolio, an impaired mobility of capital and may prevent some worthwhile ventures from being invested in. The irony of this argument is that much of the lock-in problem would be eliminated if the realization basis was utilized, since gain or loss would be taxed over the holding period and no disincentive would be involved on the sale of the asset. Thus, a preference granted to the capital asset area (recognition basis, with its attendant tax benefits, i.e. interest-free loan and timing discretion) has given rise to the lock-in problem. Solving this new problem (lock-in) by expanding the original preference (recognition basis with reduced taxation on the recognition) seems a bit absurd. Similarly, others argue that it is the present tax climate (high tax rate on dividends, interest, savings, etc.) that causes the lock-in effect. As will be discussed in Chapter VI, the general tax rates could be substantially reduced by eliminating the capital gain and loss preference, and thus, reduce the lock-in effect.

It has been argued that in a rising stock market, the market fluctuation will be exaggerated by a reduction in the supply of stocks due to the lock-in

effect, and in a down stock market, an increase in the supply of stock (immediate recognition of loss) will also accentuate the fluctuations. Several studies have shown that this analysis is faulty because most buyers are also sellers of securities, and thus, the gap between supply and demand is reduced. Another weakness of the lock-in argument is that its impact is partially attributable to the distinguishing of long-term from short-term status<sup>22</sup> and, therefore, provides incentives to hold until long-term status is achieved. To this extent, the lock-in problem is caused by the capital gain provisions, rather than a justification for it.

Another argument often raised in justifying, in fiscal policy terms, the capital asset preference is that capital gains represent nominal, rather than real, income since inflation adjustments would produce a smaller gain or a loss. This is an argument that nominal income is not real income, which is particularly compelling for a society that has experienced double-digit inflation throughout the preceding decade. A study by Martin Feldstein<sup>23</sup> concluded

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<sup>22</sup> The lock-in caused by the long-term/short-term dichotomy can be illustrated by the following factor formula:

$$1 - \frac{1 - \text{Marginal Tax Rate}}{1 - (\text{Marginal Tax Rate} \times .40)} = \text{Factor that appreciation could be reduced by holding longer than one year and still be as well off}$$

EXAMPLE

Individual owns stock bought seven months ago for \$10,000, now worth \$20,000 and taxpayer is in 70% bracket. If he sells now, his after-tax profit is 3,000 (10,000 x .30). If he waits more than five months, he could have his profit decline by .58 and still have 3,000 after-tax profit. If the stock stays the same or goes up, he will be better off.

PROOF:

$$1 - \frac{1 - .70}{1 - (.7 \times .4)} = 1 - \frac{.3}{.72} = .58, \text{ so if profit declined by 5,800, still as well off.}$$

4200 profit  
 1176 tax (28%)  
3024

<sup>23</sup> Martin Feldstein and Joel Slemrod, "Inflation and the Excess Taxation of Capital Gain on Corporate Stock", National Tax Journal 31 (1978): 107. Note that the real loss affected taxpayers with AGI below \$100,000, while for AGI above

that for 1973, a \$4.5 billion nominal gain on corporate stocks represents a \$1 billion real capital loss. However, this inflation effect is not unique to capital gains; it is even more applicable to interest, dividends, pension receipts, salaries. For example, if a savings account earns 6% on \$10,000 and the inflation rate is 10%, the taxpayer's nominal income of \$600 is subject to tax as ordinary income, but a real loss has been incurred on the principal, as well as the interest. With taxation being based on nominal amounts, the whole tax system is unfair, but the burden of inequity is not on capital transactions, where some appreciation is available, and where the timing is discretionary but on fixed income items like interest. Brinner's study(14) on the taxation of capital gains and inflation showed that the proportion of inflation-induced gain decreased, as holding period increased. Thus, capital gains may be the least justifiable area for special treatment under the fiscal policy criteria.

If the savings rate is considered too low, specific tax policies could be implemented without the complexities and inequities that capital asset treatment causes. The capital gain and loss preference affects the tax base to such a large degree that it reduces the amount of tax flexibility available to the government for other fiscal policy tools.<sup>24</sup> The heart of the question is why similar nonconsumption incomes should be treated differently; and why apply one rough inflation adjustment to a small part of the system and not the

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\$500,000 real income was 80% of nominal gains. Thus, it was the middle and lower income classes that suffered from the inflation effect. See also Michael Boskin, Federal Tax Reform: Myths and Realities (San Francisco: Institute for Contemporary Studies, 1978) p. 88.

<sup>24</sup> For 1978, the individual tax base was \$189 billion, while the capital gain preference was \$8 billion. Several studies have shown that the highest marginal tax rate could be in the 30+% range if capital asset preference and some other minor changes are made.

whole system? The capital gain and loss preference seems to be unjustified or, at best, weakly justified under the fiscal policy tool criterion.

### I.6 Economic Neutrality

Economic neutrality was not explicitly discussed by Adam Smith but has been developed as a criterion over the last 200 years. Economic neutrality states that a tax system should affect the taxpayer's behavior as little as possible and should be primarily concerned with raising revenue. It is believed that, by keeping taxes low and neutral, individuals will be motivated by non-tax economic considerations. This concept is obviously diametrically opposed to the fiscal policy criterion.

Given our government structure, and assuming no reduction in government expenditures, a given amount of revenue is required. If you reduce the tax on certain transactions, it increases the effective tax rate on all others.<sup>25</sup> There is no doubt that capital gain treatment, which encourages investment in certain assets rather than others, is non-neutral. By decreasing the effective tax rate on certain transactions labeled capital gains, you are raising the effective tax rate on interest, dividends, rents, royalties, pensions, and earned income. This will affect taxpayers' behaviors (as well as the complexity of the tax law). Economic neutrality, as a theoretically good income tax criterion, is seriously violated.

### Conclusion

The Adam Smith model of a theoretically good income tax has been pre-

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<sup>25</sup> Supply side economists (somewhat in vogue today) would argue that reducing some taxes will have a multiplier effect that will not require increase in tax rates on other incomes.

sented as a frame of reference to see whether the special provisions under discussion, capital gains and losses, can be justified. This chapter has shown that the special preference may be weakly justified, if at all, by the fiscal policy tool criterion but violates all the other criteria. The convenience of tax payment criterion supports the recognition doctrine but not the current capital gain and loss treatment. From this analysis, it can be seen that the special preference, at least in terms of the criteria advanced, does not represent a benefit. The following chapters will describe, analyze and measure the complexity that the capital gain and loss provisions introduce to the tax law and thus, costs attributable to the provision.

## Chapter I Citations

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## CHAPTER II

### Introduction

There is no doubt that our tax system is complex.<sup>26</sup> Judge Learned Hand<sup>27</sup> in his usual mellifluous manner has captured the feeling of this complexity:

In my own case, the words of such an act as the Income Tax, for example, merely dance before my eyes in a meaningless procession: cross-reference to cross-reference, exception upon exception -- couched in abstract terms that offer no handle to seize hold of -- leave in my mind only a confused sense of some vitally important, but successfully concealed purport, which it is my duty to extract, but which is within my power, if at all, only after the most inordinate expenditure of time. I know that these monsters are the result of fabulous industry and ingenuity, plugging up this hole and casting out that net, against all possible evasion; yet at times I cannot help recalling a saying of William James about certain passages of Hegel: that they were no doubt written with a passion of rationality; but that one cannot help wondering whether to the reader they have any significance save that the words are strung together with syntactical correctness.

To the extent that this complexity is due to the handling of sophisticated business situations, a diversity of life-styles, and government's perceived social, political and economic goals, it is perhaps unavoidable. However, this study deals with complexity that is avoidable. Avoidable or unjustifiable complexity is inefficient and socially undesirable. The progressive tax rate system, the accounting period of a year, the individual as a unit, the lack of integration between corporations and shareholders, and the allowance of itemized deductions and special credits have all added substantial complexity to our tax system. The present study does not deal with these

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<sup>26</sup> In 1913, the code was 18 pages long. Today, it encompasses over 1000 pages and this doesn't include the volumes of material covering the regulations, public and private rulings, court cases and commentary.

<sup>27</sup> Thomas Walter Swan, 57 Yale Law Journal 167, 169 (1947) cited in Charles J. Gaa, Contemporary Thoughts on Federal Income Taxation, (Belmont, California: Dickenson Publishing Co., 1969) pp. 3 and 4.

essentially unavoidable items, but only in measuring the avoidable complexity attributable to the capital gain and loss preference. Hopefully, this study will stimulate future research into other preference/complexity areas.

This chapter describes the complexities introduced into the U.S. income tax law by the capital gain and loss preference. Neither the tax expenditure dollars involved (\$11.73B for 1980) nor the complexities (15% of the tax law) are trivial. Some comments made about this preference from widely diverse viewpoints are noteworthy:

"The bargain basement of the income tax", Jerome Hellerstein,(15) a practicing lawyer and law professor emeritus at N.Y.U.

"A dollar is a dollar" of income(16) Walter Blum, professor of law, University of Chicago.

"It is pretty hard to justify treating a capital gain differently from ordinary income. I've never felt that there is anything more sacrosanct about the profit from the sale of an asset than from the sweat of your brow."(17) Wilbur Mills, former chairman of the House Ways and Means Committee.

"Money made by money should be taxed at the same rate as money made by man."(18) Senator George McGovern, former Presidential candidate.

"The most serious structural faults of our federal income tax have to do with capital gains and losses."(19) The late Henry Simons, professor of Economics, University of Chicago.

The concept of complexity has been divided into two categories in the education and psychology literature, structural and content. Content complexity is described in qualitative terms in this chapter and measured in quantitative terms in Chapter IV. Chapter VI will discuss some future research possibilities in the structural complexity area.

The content complexity attributable to the capital gain and loss prefer-

ence can be divided into five more or less distinct areas: holding period, defining a capital asset, sale or exchange, conversion of ordinary income into capital gain, and conversion of capital loss into ordinary loss.

## II.1 Holding Period

Throughout the capital gain and loss history, a distinction has been made between speculation (not to be encouraged) and investment (to be encouraged). Since the distinction is based on intent, which is hard to ascertain, an arbitrarily defined length of holding period was used to differentiate between them. Length of holding period was also used under prior acts to distinguish the degree of favorable treatment bestowed on a given transaction.(20)

If all sales, exchanges, dispositions, and distributions were taxed uniformly, the need for complex holding period rules would virtually be eliminated. The distinction between long-term and short-term status necessitates a holding period concept. In general, Sections 1231 and 1221 define this necessary holding period as more than a year. However, there are exceptions to this seemingly simple rule. For cattle and horses, the holding period must be more than 24 months (1231(b) (3)), while for commodity futures, only six months is required (1222 (11)).

A non-business bad debt, even if outstanding for more than one year, will be considered a short-term capital loss (166(d)). However, a security (capital asset) which becomes worthless after only one month (purchased in December, became worthless in January) is considered a long-term capital loss (165(g) (1)).

The holding period rules reach a zenith of complexity (and a nadir in comprehensibility) for short sales (Section 1233). In a short sale, property you may or may not own is sold for delivery at some future date. When you

close the transaction (deliver the property), the gain or loss is recognized. Since you may have previously owned property equivalent to the one sold, complex rules dealing with a hypothetical holding period were adopted. Based on this deemed holding period, what would otherwise be a long-term gain might be classified as a short-term gain, and short-term losses considered long-term losses.

How is a holding period measured for securities? Basically from trade date to trade date. However, the year in which the gain or loss is considered to occur, is based on the trade date for losses and the settlement date for gains.

In prior years, the length of the holding period was extremely important for the real property depreciation recapture rules (Section 1250). There were complex phase-out rules which, since 1976, have been almost eliminated (they still apply to certain low-income housing property - Section 1250(d) (8)). The length of the holding period is still important in determining the gain from disposition of farm land (Section 1252) where a reduction in the amount of recapture is based on the length of the holding period in excess of five years.

The holding period rules create some interesting anomalies in the receipt of property as a gift or from an estate. If your parents bought a stock for \$10 in January 1981, died in March 1981 when the stock's value was \$15, and you sold the inherited stock for \$30 in May 1981, then the \$15 gain (30-15)<sup>28</sup> would be long-term capital gain even though you and your parents (separately or combined) held the stock a year or less (1223 (11)). However, if the property was a gift, very different rules apply. The gain would be short-term since the total holding period by donor and donee was less than one year. The holding

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<sup>28</sup> Note that the difference between \$15 and \$10 is not taxable at all for income tax purposes.

period rules are more complex when the donor's basis in the property is greater than its f.m.v. at date of gift. For gain purposes, you tack on the donor's holding period to yours, while for loss purposes, you don't.

The tax status of transfers of property to a corporation and distributions from a corporation also depend on the holding period. If two shareholders form a corporation by contributing one building each, and one shareholder held the building eleven months, the other thirteen months; then the length of the holding period of the first shareholder's stock will be computed from the date of contribution while the second shareholder's holding period is thirteen months (Section 1223 (1)).

These few examples illustrate the complexity and arbitrariness of determining holding period necessitated by the capital gain and loss preference.<sup>29</sup> It is understandable that many taxpayers feel that the law is too complex and, therefore, they don't properly comply.

## II.2 Defining a Capital Asset

Probably the most serious complexity in the tax code arises in defining a capital asset. Defining a capital asset is "one of the most vexatious and slippery technical problems in the income tax field".(21) The tax code defines a capital asset by citing what it is not.<sup>30</sup> If a taxpayer can fit his transaction into the proper category, he gets a 60% reduction in income for tax purposes. This is why the special capital gains provisions have been called the

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<sup>29</sup> It should be noted that holding period would still be required, although on a much simpler plane, for investment credit purposes, Section 355 trade on business rules, depreciation, and possibly for such specialized areas as Regulated Investment Companies' gains (3-month rule).

<sup>30</sup> See Internal Revenue Code Section 1221 which excludes six categories of assets and Section 1222 which limits it to sales or exchanges.

"bargain basement" of the tax law.<sup>(22)</sup> Much time, energy, money, and planning are expended in this area. To a large extent, the form over substance argument in the tax law originates with this definitional problem. A few examples of the hair splitting that goes on in this area will reinforce the saying "old loopholes never die, they just get bigger".<sup>(23)</sup> Philip Stern's *The Great Treasury Raid*<sup>(24)</sup> has a nice analogy that deserves repeating. He equates the tax law with a dam; the high water being the tax on regular income and the low water being the capital gain tax on preferential income. The erosion of the dam presents a serious problem for the U.S. income tax system, well-illustrated by the underground economy<sup>31</sup> or the words of former Secretary of Treasury Barr, "we now face the possibility of a taxpayer revolt if we do not make major reforms in our income taxes".<sup>32</sup>

A few examples will help describe the hair splitting involved in defining capital assets.

A. Investor vs. Dealer Status: This distinction in tax status is crucial to income's capital/ordinary classification. If you are an investor or trader in stocks or securities, the gains or losses are capital, even if you trade millions of dollars of stock every few days. If you are a dealer in securities (essentially dealing with clients or customers), the securities do not qualify

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<sup>31</sup> See Wall Street Journal October 20, 1980 where estimates are as high as \$700 billion and Professor Guttman's estimate of a \$150-250 billion underground economy.

<sup>32</sup> Roger Freeman, Tax Loopholes: the Legend and the Reality p. 11. See also Proposal for Tax Change, Department of Treasury 4/30/73. Even if complexity affects only a minority of the population, it still affects the majority through its impact on compliance and the self-assessment system, and by its effect on the morality of the populace. It has been argued that complexity encourages Gresham's Law (bad tax advice will drive out good tax advice due to the cost factor), the Lottery Philosophy (chance of getting audited is small, so why not cheat) and the Underground Philosophy (the rich have their loopholes, mine will be nonreporting of income). See also Walter Blum "How the Favored Tax Treatment Affects Taxpayers and Practitioners", *Journal of Taxation* 4 (1956): 28.

as capital assets and your transactions are ordinary in nature.

In the real estate area (building or land), dealer status also leads to ordinary income treatment while investor status creates capital gains. Unlike the securities area, an occasional sale of real estate every few years could constitute dealer status. The dealer/investor distinction caused such problems that a special section (Section 1237) was enacted to mitigate the problem in certain limited circumstances.

The extent to which this distinction may be stretched was recently evident in a series of revenue rulings dealing with charitable contributions. If an asset is inventory (dealer status), then there are severe limitations (basis) on the charitable contribution deduction allowable under Section 170. If investor status is allowed, then fair market value or some variant of fair market value (f.m.v. - 40% appreciation) will be allowable, subject to a 30% or 50% of AGI limitation. The rulings covered the tax status of individuals donating gems, books, bibles, and plants.

B. Copyright vs. Patent: A copyright, literary, musical or artistic composition is excluded from the capital asset definition (Section 1221 (3)), while patents are specifically allowed as long-term capital assets (Section 1235), even if not held longer than one year. Why the distinction between these essentially similar items exists, is an interesting question? To compound the problem, capital gain status is granted to patent holders whether they are amateurs (investors) or professionals (dealers).

C. Northern Pine vs. Southern Pine Trees: Evergreen trees which are more than six years old and sold for ornamental purposes (Christmas trees) are 1231 assets which might lead to capital asset treatment of gains while Southern pine trees (life of less than six years) are excluded from capital gain treatment.<sup>33</sup>

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<sup>33</sup> See IRC Section 631(a) & 1231(b) (2), and New York Times, January 1, 1980, p. 32.

The horizontal equity and public policy arguments seemed to be ignored here.

D. Cash Bonus vs. Qualified Stock Option: A cash bonus is ordinary income when received (or constructively received), while qualified stock options will lead to capital gain treatment even though both are compensation for the same services.

E. Loan vs. Note: A Subchapter S Corporation's shareholders are allowed a loss deduction at the individual level to the extent of their basis in the corporate stock and indebtedness of the corporation to the shareholder. The loss reduces the basis of the stock and debt, but not below zero. If the indebtedness is subsequently repaid, the type of debt will determine the character of the repayment gain. If it is a loan, ordinary income rules will apply; if it is a note, capital gain rules will be in effect.<sup>34</sup>

F. Treasury Bills vs. Treasury Bill Futures: Treasury bills are statutorily defined as non-capital assets (Section 1221 (5)), but treasury bill futures are considered capital assets.<sup>35</sup> Thus, there is potential for converting ordinary income into capital gains and capital loss into ordinary loss. This conversion concept will be discussed and illustrated in more detail in II.4 and II.5, below.

Judicial doctrines (e.g. Corn Products and Arrowsmith) further complicate this area. Unfortunately, the complexity introduced by judicial made law is not measured by the quantitative analysis performed unless it is specifically codified or part of the regulations. Thus, the results of the analysis will probably understate the true complexity.

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<sup>34</sup> See IRC Section 1374(a) and (c) (2) (A) and (B), and Bernard Barr V. Comm., 80,003 1980 P.H. TC memo.

<sup>35</sup> See Rev. Ruling 78-414, 1978-2 CB 214 and Terence Kane, "Tax Treatment of Treasury Bill Futures", Southern California Law Review 53 (1979): 1555.



### II.3 Sale or Exchange

In order for a transaction to be eligible for capital gain or loss treatment, it must involve a sale or exchange. Often life's activities don't fit neatly into this criterion, so exceptions, refinements or expansions of the term have been required.

A. Worthless Debt or Securities: As protector of the revenue, the Treasury is mindful of the loss of tax dollars. This is partially the reason for the asymmetrical treatment between short-term capital gains and short-term capital losses. The worthlessness of debt or security would not be considered a sale or exchange. Thus, the worthless debt could not be considered a capital loss and would be deductible as ordinary loss without limit. The law, however, expanded the sale or exchange definition to specifically encompass worthlessness (165(g) and 166(d)).

B. Loss on Failure to Exercise an Option: Similarly, if a taxpayer bought an option to buy stock and didn't exercise the option, no sale or exchange would have occurred and an ordinary loss would be recognized. Section 1234 was enacted to define the non-exercise as a "sale or exchange" and, therefore, as a capital rather than ordinary loss. Otherwise, a taxpayer could buy an option; if the price decreased, let the option lapse and get ordinary loss. If a favorable price increase occurs, the option would be exercised and a capital gain recognized.

C. Involuntary Conversion: When property is stolen, condemned, burned, or broken, few would classify this as a sale or exchange, but the tax law defines it as such in Section 1231. This inclusion further complicates an already complex code section.

D. Cancellation of a Lease or Distributor's Agreement: If a lessor pays out the lessee in order to vacate the premises, the lessee will treat the money as in exchange for the lease. Similarly, a distributor who is bought out by the

manufacturer from their sales agreement, will treat the transaction as an exchange.

E. Cutting of Timber: By no stretch of the imagination would the pure cutting of timber constitute a sale or exchange, but it is so defined and, therefore, it too is eligible for capital gain treatment (Section 631(a)).

At this point the average taxpayer must be scratching his head and wondering about the why's and wherefore's of our mysterious tax system, its intricacies and untold traps and treasures.

#### II.4 Conversion of Ordinary Income into Capital Gains

Given a 60% discount on certain types of income, a taxpayer or his tax advisors exert an enormous amount of energy to fit a transaction into the 'right' framework. Such fitting and the government's response has been a complicating factor throughout the income tax system.<sup>36</sup> The government sets up an incentive (usually justified under the fiscal policy tool criterion); taxpayers use (abuse) the incentive; the government limits the incentive. On and on, round and round, complicating the system, this vicious cycle persists, and results in inefficiency in both the private and public sector.

Several classic examples of this might be useful to illustrate the point:

A. Government wanted to encourage capital investments, so it allowed accelerated depreciation methods for real estate and tangible personal property. Taxpayers utilized the allowable deduction against ordinary income and when the property was sold, the taxpayer recognized capital gains (technically Section 1231 gains). The government felt that this was too much of a good thing, so it imposed depreciation recapture rules. (See Sections 1245, 1250, 1251, 1252,

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<sup>36</sup> 65% of all code sections are affected by the C/G/L preference. See Table 8, p. 68 below.

1254<sup>37</sup> and its effect on 336, 311, 1031, 751, 351, 361, 1239, etc.)

B. Government wanted to encourage certain economic activities (oil exploration, real estate development, coal mines, cattle ranching, etc.) so favorable tax laws were passed; investors used (abused) the benefits of leverage, deferral and capital gains; tax shelters are now the number one I.R.S. audit target.

C. A corporation is doing business that will yield ordinary income. Prior to realizing a substantial portion of the ordinary income, the shareholders sell the stock, liquidate the company or distribute the property, and the shareholders' gain will be capital rather than ordinary. Thus, the taxpayer converted the corporation's ordinary income into his own capital gain. To prevent the above scenario, Section 341 (Collapsible Corporations) was enacted. In a classic example of this, an actor formed a corporation to produce a movie. After previews, but before distribution, the corporation was liquidated so the shareholders had capital gain on the sale of their stock and a basis in the property equal to its fair market value. When the proceeds from the movie were received, they were offset by depreciation deductions. The taxpayer's equivalent of the alchemist's dream was performed (iron into gold, ordinary income into capital gains).

Similar scenarios were common in the construction and real estate areas. Both the structural and conceptual complexity caused by this shift of ordinary income into capital gain back into ordinary income is astounding. If readability tests or educational syntax measures<sup>38</sup> were applied to Section 341, it

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<sup>37</sup> These five sections alone, without its ripple effect on other sections, account for almost 1,000 paragraphs or 2.5% of the income tax laws total complexity.

<sup>38</sup> See the Flesch Test, Journal of Applied Psychology 32 (1948): 221, or Dale-Chall Test, Educational Research Bulletin 27 (1948): 11, for development and discussions of the readability test. See Smith and Smith, "Readability: A Measure of the Performance of the Communication Function of Financial Reporting", Accounting Review 46 (July 1971): 552, for the application of these tests to annual report notes.

would probably be the equivalent of 10 on the Richter scale or require post-graduate training to comprehend it. To make matters more complex, similar rules apply to partnership distributions or liquidations (see Section 751).

D. The conversion of ordinary income (short-term capital gains) into long-term capital gains and back into ordinary income is also at the heart of the short sale rules (Section 1233) discussed in the holding period subchapter above.

## II.5 Conversion of Capital Loss into Ordinary Loss

Capital gains are treated favorably vis a vis ordinary income. Capital losses are treated less favorably than ordinary losses. Therefore, the taxpayers try to convert long-term losses into short-term or ordinary losses, and complexity results.

A. A wholly or partially worthless business bad debt is an ordinary loss, while only a non-business bad debt that is wholly worthless constitutes a short-term capital loss, even if outstanding more than one year. Much planning and litigation has gone into this area because of the significantly different tax consequences.

B. Similarly, if a debt by a corporation is an interest-bearing note, then a loss on it will probably be a long-term capital loss (Section 165(g) (1) and (g) (2) (c)). If it is an open account loan, then Section 166(d) will allow it short-term capital loss treatment.

C. The same criteria and definitional problems are involved in the debt-equity issue (Section 385). If a contribution to the corporation which becomes worthless is deemed to be a loan, then the loss will be a short-term capital loss; if it is construed to be stock, then it will be long-term capital loss.

D. A short sale was often used to convert a long-term capital loss into a short-term loss. The government objected to this strategy and instituted the

Section 1233 rules. These complicated rules reconverted the short-term capital loss into long-term ones.

E. One of today's major I.R.S. targets is the tax commodity straddle. Basically, it is aimed at generating a short-term capital loss now and in some future period a long-term capital gain, without incurring any significant market risk. This problem would still exist without a capital asset preference (due to the timing of income problem), but its magnitude would be significantly reduced.

The above illustrates the complexity of the tax law attributable to the special preferential treatment of capital gains and losses. Some people argue that the definition should be limited, the preferential rate (60%) should be reduced, or the holding period should be extended. These modifications would limit the advantages of a preference vis a vis other passive and earned incomes, but it would only be a stop gap measure that simplifies little of the existing complexity and adds more uncertainty to the tax law.

## Chapter II Citations

- (15) Jerome Hellerstein, Taxes, Loopholes and Morality, p. 28.
- (16) Walter J. Blum, "A Handy Summary of the Capital Gain Arguments", Taxes 35 (1957).
- (17) Roger A. Freeman, Tax Loopholes: the Legend and the Reality, p. 41.
- (18) Ibid.
- (19) Henry C. Simon, Personal Income Taxation, p. 185.
- (20) Tables 3 - 6, pp. 13 - 16 above.
- (21) Hellerstein, p. 42.
- (22) Ibid., p. 28.
- (23) Stern, The Great Treasury Raid, p. 271.
- (24) Ibid.

## CHAPTER III

### COMPLEXITY MEASUREMENT MODEL - THEORETICAL BASIS

Complexity can be measured in terms of either its syntactical or conceptual impact. Syntax complexity deals with the length of the words or the nature of the sentence structure, while conceptual complexity relates to the comprehension difficulty. Conceptual complexity makes comprehending, implementing, interpreting, and administering the tax law very difficult for a multitude of reasons. In the language of communications research, you are adding 'noise' to the information system that is causing the message received to differ from the message sent. You not only have to determine what income is (a problem that has plagued accountants for years), but whether the income is ordinary or capital. You not only have to determine the proper period in which a transaction's consequences should be recognized, you have to figure how long the property was held. You have to determine who is the true owner of the property, as well as to distinguish a disposition from a sale or exchange.

A content analysis model to relate the conceptual complexity of the capital gain or loss provision is developed in this chapter. A review of the education, psychology, behavioral science, and communications literature demonstrates that content analysis was appropriate for measuring a concept's complexity.<sup>39</sup> The education and psychology literature basically discusses complexity and its effect on the reader. Many studies have been done on audiences of preschool, grade school, college, adult, retarded, or normal participants to judge the effect of complexity on memory and comprehension. Reading was the princi-

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<sup>39</sup> See footnote 6, as well as George Gerbner, et. al., The Analysis of Communication Content, (New York: J. Wiley & Sons, 1969). Frederick Kerlinger, Foundations of Behavioral Research, (New York: Holt Rinehart & Winston, 1964); and Gardner Lindzey and Elliot Aronson, The Handbook of Social Psychology, Vol. II, 2nd edition, (Reading, Massachusetts: Addison-Wesley Publishing Co., 1968).

pal focus of these studies although studies on math skills and word problems have also been a popular avenue of research.

Content analysis has been defined as the attempt to score, categorize and obtain useful objective data from written material in a testable and reliable manner. The use of words, sentences, paragraphs, themes, time/space as subdivisions is prevalent in many previous content analysis studies. The aim of these studies was to produce an index which represents some attitudinal level objectively. Two basic concepts of content analysis are the recording unit and the context unit. A 'recording unit' is defined as the 'smallest body of content in which the appearance of a reference is counted'. In this study, the reference will be the theme of capital gain or loss preference, and it will generally be explicitly stated within the context unit. The 'context unit' is the largest body of content that may be examined in characterizing a recording unit.(25) The paragraph will be the context unit in this study. The relative frequency of the theme (capital gains or losses), compared with the total number of paragraphs in the income tax law, will determine the conceptual complexity attributable to the specific preference. The methodology utilized in this study is reinforced by the following quote:

The most obvious case occurs when source materials are voluminous and complicated, and when they contain all sorts of different kinds of subject matters. Especially if detailed investigation of a complicated question is involved, such a case is the exact predicament that content analysis was originally invented to deal with.(26)

The present study will utilize content analysis to measure the tax laws' conceptual complexity attributable to capital gain and loss rules rather than structural complexity. I chose the Internal Revenue Code of 1954 and the income tax regulations (final, proposed and temporary) as my data base, since they represent the income tax law of the United States and official interpretations thereof. I did not include public and private rulings because a signifi-



cant number of areas are not ruled on.<sup>40</sup> I did not use court cases as part of my data base for several reasons. The population of court cases (district court, tax court, tax court memos, court of claims, court of appeals, board of tax appeals, board of tax appeal memos, and supreme court) is astoundingly voluminous and due to the appeals procedure heavily redundant. Second, the pre- and post-1954 code section numbering could be the same or different which would make code classifications difficult. Further, an issue (theme) could be made non-applicable to the issue at hand, and thus, the objectivity, reliability and testability of the model would be reduced.

The Internal Revenue Code of 1954 is the U.S. income tax law. I used the Prentice-Hall, Inc. May 1, 1979 edition which includes amendments made by public laws enacted subsequent to P.L. 591, August 16, 1954. It does not include the several laws that have been passed since April, 1979. Thus, the Windfall Profits Tax, the Installment Sales Revision Act of 1980, Foreign Investment in Real Property Tax Act of 1980, Bankruptcy Tax Act, and any post-1979 technical corrections acts or miscellaneous tax bills will not be reflected in this study. It was necessary to have some lagged cut-off date in order to allow time for regulations to be proposed for the code sections under study. I will use as my code data base, Subtitle A, Chapters 1-6, covering Code Sections #1 - 1564 inclusive, and the Prentice-Hall Federal Regulations, June 1, 1980 edition, volumes 1-3 will be utilized to complement or interpret the code. I feel this is particularly appropriate, since Code Section 7805 expressly gives the Secretary of the Treasury the right to prescribe all needful rules and regulations for the enforcement of the code.

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<sup>40</sup> See Rev. Procedure 81-10, 1981-13 IRB 44 and Regulation 601.201 (S)(2) which discuss various issues that will not be ruled on.

Originally, my study was going to encompass the regulations only, but it was noted that a significant number of code sections have no regulations and this would bias the analysis. Further, some code sections are clearer or more explicit than others and others leave the prescribing of the law to the regulations.<sup>41</sup> The code alone could not be the total data base since much of the explanation and interpretation occurs at the regulation level. Therefore, the code and regulations will be the data base, even though there might be some double counting of context units.

A statistical sample of 35 out of 580 code sections demonstrated there was no significant difference between using lines or paragraphs as the context unit, while using the capital gain and loss preference as the theme (see Appendix A). Because of potential writing style differences of law drafters and to minimize the potential problem of varied type-setting and page size, the paragraph was, therefore, selected as the context unit. A paragraph is defined, for purposes of this study, as any group of words that commence with an indentation from the margin. Thus, the term 'paragraph' would also encompass subparagraphs, parts, subparts, examples, tables, charts, or numerical examples. A slight amount of subjectivity is introduced in this counting process, since an indent such as 1.72-15(f) where an example's introduction is followed by three examples will count as three, not four paragraphs. This is necessary to eliminate paragraphs that have no theme (recording unit) embodied in it. I have also ignored section titles in the counting. Thus, Regulations 1.263(d) and 1.263(d)-1 do not count. By counting indentations, certain sections will be given undue weight, especially when a list of items is presented. For example, Regulation 1.190-2(b) (10), describing a handicapped toilet room, has

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<sup>41</sup> See Internal Revenue Code Sections 385 and 1502, for example.

sixteen paragraphs, most of which are width and depth measurements.

I have integrated final, temporary and proposed regulations to increase the scope and reduce redundancy. The final Sec. 541 regulations that apply to pre-1969 period were ignored, and post-1968 proposed regulations were counted in its place. Similarly, the post-1968 regulations of Sec. 665-668 were used in the count, and not pre-1969 regulations.

The second phase of the model involves the analyzing of all 584 code sections and their respective regulations to determine whether the recording unit (the capital gain and loss concept) is complicating a context unit (a paragraph). In many situations, the term capital gain or loss will be explicitly used. In that case, a counting of one theme per paragraph will be utilized. Therefore, if capital gains or losses is discussed three times in one paragraph, it counts as one recording unit per context unit. Conversely, if one paragraph includes one capital gain or loss theme and several other themes, that paragraph will also be considered to be complicated by the preference under study. If the sale or exchange concept, or the holding period idea, is inherent in the paragraph, this too shall be considered an explicit example of the theme being present.

A more difficult problem involves the less obvious situation in which no explicit mention of capital gains or losses is made, but the theme is embodied in the paragraph. I will give a few examples and discuss how I treated these situations to maintain reliability and objectivity. Both Sections 311 and 336 discuss the taxation of a distributing (redeeming) or liquidating corporation on the distribution of property to shareholders. Neither code section mentions depreciation recapture, a fundamental complicating factor due to capital gain and loss special treatment. Code sections 1245, 1250, 1251, 1252, 1254 recapture rules override the non-recognition of gain sections such as 311 and 335.

My count would take the recapture/capital gain theme into account by adding one to the code section count due to the preference. Similarly, Section 188 discusses the amortization of certain expenditures for child care facilities. There is no mention of the capital gain theme in the code or regulations; yet depreciation recapture under 1245 and 1250 apply to these facilities when sold or disposed of at a gain. Again, the code section will be considered to have one paragraph with a preference theme.

Section 483 involves the concept of characterizing income as interest income or capital gain. Its effect on personal holding company status, subchapter-S status, trust rules, and installment sales is mind boggling. To try and capture all the nuances of complexity, as well as the secondary and tertiary effects of this preference, I used several authoritative resource books as references.(27) In addition, to improve the reliability of my model, I reviewed the findings of Jack Schroeder's study(28) to see how he rated the various sections, and I reconciled any differences (see Appendix B). Basically, discrepancies between our two studies arose from changes in the law between 1974 and 1979; his study had three categories (all, some, none), while my study utilizes a more continuous function; his used court cases and rulings and ignored the regulations, while mine looked objectively at just the code and regulations; and he generalized a whole area as somewhat preference-inspired, when only a small piece was attributable to capital gain and loss rules.

Beyond these relatively minor differences, his study has some serious limitations. His study covered only Chapter 1 of the Internal Revenue Code, Sections 1 - 1388, while I examined Chapters 1-6, Sections 1 - 1564 which constitutes Subtitle A - Income Taxes. Leaving out consolidated returns and controlled groups (Chapter 6) is a serious omission. His study did not quantify complexity, thus, he assumed that all code sections were equally complex. Further, regulations were not considered at all in his study.

To further test the reliability of my study and its results, I enlisted a panel of tax experts to list the top ten complex income tax code and regulation sections. It was felt that this survey should reflect similar results to the complexity model's findings. The data and results are presented in Appendix C. The results of this informal survey support the measurement model's findings.

#### Potential Limitations of the Model and its Application

Objectivity, reliability and testability have all been stressed in the communications literature.<sup>(29)</sup> I have formulated my complexity model to maximize all three of these characteristics. This introduced some limitations to my study. For example, judicial law, not codified, was omitted from the input.<sup>42</sup> One could try to input court cases, rulings and commentary into the model, but this would increase the subjectivity of the study. The cost of losing objectivity, reliability and testability was felt not worth the added benefits.

Another potential weakness of the study is that all paragraphs are assumed equally complex (simple). This is obviously not true. It might be interesting to randomly select paragraphs of code and regulations and test them for syntactical or conceptual complexity, but this will be deferred to future studies.

Another potential criticism is that because a section has many paragraphs does not mean that it is complex in application, since a full explanation might reduce complexity. Habitual readers of tax law know that, at least for tax regulations, this is not the case.<sup>43</sup>

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<sup>42</sup> For example, the Corn Products (55-2 USTC 9746) and Arrowsmith (52-2 USTC 9527) doctrines would not be reflected explicitly in the study, but they do complicate the law due to the C/G/L preference.

<sup>43</sup> In addition, Appendix C confirms the relationship between volume of paragraphs and degree of complexity.

### Chapter III Citations

- (25) Bernard Berelson, Content Analysis in Communication Research, p. 135.
- (26) Thomas F. Carney, Content Analysis - A Technique for Systematic Inference from Communications, p. 64.
- (27) CCH Standard Federal Tax Reporter 1981 edition, McNee, Nelson & Whitmire, Federal Taxation on Partnerships and Partners (Boston: Warren, Gorham & Lamont); Bittker and Eustice, Federal Income Taxation of Corporations and their Shareholders, (Boston: Warren, Gorham & Lamont, 1980); Prentice-Hall Federal Tax Course, 4th edition, (Englewood, New Jersey, 1979).
- (28) Jack Schroeder, Potential Simplification of the Federal Income Tax Law by Eliminating Special Treatment of Capital Gains and Losses.
- (29) Berelson, p. 128.

## CHAPTER IV

### MEASUREMENT MODEL'S APPLICATION

The model will measure the complexity attributable to the capital gain and loss preference by examining all 584 income tax code sections and their respective regulations. Complexity is defined as the number of paragraphs (context unit) that contain the capital gain or loss theme (recording units) as compared to total paragraphs. Table 7, attached, shows the process used to determine the complexity in the income tax law introduced by capital gains and losses and the results. This determination is calculated in a two-step process. All of the code and regulations paragraphs are counted, added and totalled (i.e. 9040 paragraphs in the code, 31,422 paragraphs in the regulations). Each code section's relative weight can, thus, be calculated. Second, each code and regulation is analyzed for the theme of capital gains or losses. The percentage of capital gain or loss paragraphs to total paragraphs on a code section-by-code section basis will determine the capital gains complexity attributable to that section. The capital gain complexity multiplied by the relative complexity of a section (summed for all the sections) will determine the total complexity attributable to the capital gain and loss preference. At this point, an example might be helpful to explain the mechanization. Assume that code section 1502 (consolidated returns) is the focus of our attention. Table 7, Line 576 contains the vital statistics. There is one code paragraph and seven hundred and fifty-seven regulation paragraphs for that code section. Seven hundred and fifty-eight paragraphs out of 40,462 total paragraphs for all sections means that 1.87% is the weight of this section. Eighty-five of the regulation paragraphs include the preference under study, so 11.2% of this section's complexity is due to the capital gain and loss preference. Relative section weight times capital gain complexity produces the weighted average complexity attribut-

able to the capital gain and loss preference (.21%).

### Findings

The model shows that the capital gain and loss special treatment has contributed to over 15% of the tax law's complexity. That one concept or theme could cause so much difficulty is a very interesting finding. The tax law is designed to tax the income of our society (GNP might be a rough proxy for this). As mentioned in Chapter I.5, 1% of GNP was raised in new equity issues during the 1970's. Only 7% to 9% of all individual tax returns showed any capital gain or loss at all, and yet, this one theme has complicated the law by over 15%.

Another interesting finding of this content analysis model is that 383 out of 584 (65%) income tax code and regulation sections are affected in some small or large way by the capital gain and loss preference. Thus, it is not just a few major sections of the law dealing with capital gain and loss that make it complex, but rather it is a widespread complication to the whole system (see Table 8).

All 584 code sections, in descending order of complexity, are listed in Table 9. It is comforting to note (from the point of view of reliability) that many of the issues that are considered complex by the legislature are high on the list. For example, several bills have been proposed in the last few years to simplify the depreciation area. Section 167 (depreciation) is number two on the complexity list. The pension tax law introduced in 1974 (ERISA), has been facetiously labeled the "Lawyer's and Accountant's Employment Act of 1974". Section 401 (pensions) tops the hit parade, and eight sections in the pension area (subchapter D, Part I, Sections 401-415) are in the top fifty complex code sections. Another area that is considered highly complex under the content



analysis model is investment tax credits (subchapter A, Part IV) with three sections in the top fifty. Primary justification for the Installment Sales Revision Act of 1980 was its previous complexity. Section 453 ranks number fifty-seven in complexity. The foreign area has long been viewed as a significantly complicating factor in our tax law. This assertion is borne out by the fact that eleven sections primarily applicable to the foreign area of the tax law are in the top fifty (Sections 861, 993, 954, 955, 904, 1248, 367, 964, 901, 995, and 913). Table 10 summarizes the forty-nine sections that include more than two hundred paragraphs in their code and regulations, by subchapter classification.

Another interesting insight into this area is an analysis of the informal survey of tax experts discussed in Chapter III and Appendix C. The amount of complexity attributable to the forty-four sections selected by the panel was 40% (see Appendix C, Table 13).

CAPITAL GAIN  
AND LOSS PARAGRAPHS

IRC SECTION	(1) TOTAL PARAGRAPHS		(2) REGULATION		TOTAL	CODE	REGULATION	TOTAL	(3) CAPITAL GAIN AND LOSS PARAGRAPHS		TOTAL COMPLEXITY	(4) = (3) / (1)	(5) = (7) * (8) / (1)
	CODE	TOTAL	REGULATION	TOTAL					(6) = (1) - (2)	(7) = (1) * (3)			
1.	10.	13.	0.	0.	0.	0.	0.	0.	.00000000	.00000000	.00000000	.00000000	
2.	24.	32.	0.	0.	0.	0.	0.	0.	.00138401	.00000000	.00000000	.00000000	
3.	13.	10.	0.	0.	0.	0.	0.	0.	.00056843	.00000000	.00000000	.00000000	
4.	7.	7.	0.	0.	0.	0.	0.	0.	.00017300	.00000000	.00000000	.00000000	
5.	7.	7.	0.	0.	0.	0.	0.	0.	.00034600	.00000000	.00000000	.00000000	
6.	8.	0.	0.	0.	0.	2.	0.	0.	.00019772	.00000000	.00000000	.00000000	
7.	10.	44.	0.	0.	0.	5.	0.	0.	.00133459	.00000000	.00000000	.00000000	
8.	4.	6.	0.	0.	0.	0.	0.	0.	.00024715	.00000000	.00000000	.00000000	
9.	2.	0.	0.	0.	0.	0.	0.	0.	.00004943	.00000000	.00000000	.00000000	
10.	2.	0.	0.	0.	0.	0.	0.	0.	.00004943	.00000000	.00000000	.00000000	
11.	33.	49.	0.	0.	0.	1.	0.	0.	.00202659	.00000000	.00000000	.00000000	
12.	2.	1.	0.	0.	0.	0.	0.	0.	.00007414	.00000000	.00000000	.00000000	
13.	5.	0.	0.	0.	0.	0.	0.	0.	.00012357	.00000000	.00000000	.00000000	
14.	2.	1.	0.	0.	0.	0.	0.	0.	.00007414	.00000000	.00000000	.00000000	
15.	16.	24.	0.	0.	0.	0.	0.	0.	.00096658	.00000000	.00000000	.00000000	
16.	19.	24.	0.	0.	0.	0.	0.	0.	.00106273	.00000000	.00000000	.00000000	
17.	35.	65.	0.	0.	0.	0.	0.	0.	.00247145	.00000000	.00000000	.00000000	
18.	4.	3.	0.	0.	0.	0.	0.	0.	.00017300	.00000000	.00000000	.00000000	
19.	65.	108.	0.	0.	0.	0.	0.	0.	.00000000	.00000000	.00000000	.00000000	
20.	136.	474.	0.	0.	0.	0.	0.	0.	.00427562	.00000000	.00000000	.00000000	
21.	18.	199.	0.	0.	0.	0.	0.	0.	.01507587	.00000000	.00000000	.00000000	
22.	244.	357.	0.	0.	0.	0.	0.	0.	.00532306	.00000000	.00000000	.00000000	
23.	18.	124.	0.	0.	0.	0.	0.	0.	.01465344	.00000000	.00000000	.00000000	
24.	28.	97.	0.	0.	0.	1.	0.	0.	.00350947	.00000000	.00000000	.00000000	
25.	55.	22.	0.	0.	0.	0.	0.	0.	.00306332	.00000000	.00000000	.00000000	
26.	12.	50.	0.	0.	0.	0.	0.	0.	.00190302	.00000000	.00000000	.00000000	
27.	13.	22.	0.	0.	0.	0.	0.	0.	.00153330	.00000000	.00000000	.00000000	
28.	25.	0.	0.	0.	0.	0.	0.	0.	.00086591	.00000000	.00000000	.00000000	
29.	18.	53.	0.	0.	0.	1.	0.	0.	.00061784	.00000000	.00000000	.00000000	
30.	55.	47.	0.	0.	0.	7.	0.	0.	.00175473	.00000000	.00000000	.00000000	
31.	14.	140.	0.	0.	0.	5.	0.	0.	.00252088	.00000000	.00000000	.00000000	
32.	16.	176.	0.	0.	0.	4.	0.	0.	.00380604	.00000000	.00000000	.00000000	
33.	17.	31.	0.	0.	0.	13.	0.	0.	.00474519	.00000000	.00000000	.00000000	
34.	29.	10.	0.	0.	0.	2.	0.	0.	.00116630	.00000000	.00000000	.00000000	
35.	1.	0.	0.	0.	0.	0.	0.	0.	.00096387	.00000000	.00000000	.00000000	
36.	1.	0.	0.	0.	0.	1.	0.	0.	.00002471	.00000000	.00000000	.00000000	
37.	10.	35.	0.	0.	0.	1.	0.	0.	.00002471	.00000000	.00000000	.00000000	
38.	47.	397.	0.	0.	0.	1.	0.	0.	.00111215	.00000000	.00000000	.00000000	
39.	4.	3.	0.	0.	0.	1.	0.	0.	.01097326	.00000000	.00000000	.00000000	
40.	3.	4.	0.	0.	0.	0.	0.	0.	.00017300	.00000000	.00000000	.00000000	

TOTAL PARAGRAPHS AND LOSS PARAGRAPHS

JRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
41.	75	9.	27.	1.	0.	1.	.03703704	.00066729	.00002471
42.	77	2.	7.	1.	0.	1.	.14265714	.00017300	.00002471
43.	78	1.	12.	0.	0.	0.	.00000000	.00029657	.00000000
44.	79	8.	108.	0.	0.	0.	.00000000	.00266917	.00000000
45.	80	5.	5.	3.	0.	3.	.60000000	.00012357	.00007414
46.	81	2.	2.	0.	0.	0.	.00000000	.00004943	.00000000
47.	82	1.	8.	0.	0.	0.	.00000000	.00019772	.00000000
48.	83	27.	124.	11.	0.	12.	.09277419	.00306460	.00029657
49.	84	4.	4.	0.	0.	2.	.50000000	.00009586	.00001943
50.	85	6.	31.	0.	0.	0.	.00000000	.00076615	.00000000
51.	101	25.	141.	1.	0.	1.	.00709230	.00348475	.00002471
52.	102	3.	8.	1.	0.	1.	.12500000	.00019772	.00002471
53.	103	59.	605.	1.	0.	1.	.00165789	.01495230	.00002471
54.	104	18.	25.	0.	0.	0.	.00000000	.00061786	.00000000
55.	105	42.	192.	0.	0.	0.	.00000000	.00474519	.00000000
56.	106	1.	4.	0.	0.	0.	.00000000	.00009886	.00000000
57.	107	2.	5.	0.	0.	0.	.00000000	.00012357	.00000000
58.	108	3.	9.	1.	0.	1.	.11111111	.00022243	.00002471
59.	109	1.	3.	1.	0.	1.	.33333333	.00007414	.00002471
60.	110	3.	5.	0.	0.	0.	.00000000	.00012357	.00000000
61.	111	7.	20.	0.	0.	0.	.15000000	.00049439	.00007414
62.	112	11.	46.	0.	0.	0.	.00000000	.00113687	.00000000
63.	113	1.	2.	0.	0.	0.	.00000000	.00004943	.00000000
64.	114	5.	14.	0.	0.	0.	.00000000	.00034600	.00000000
65.	115	2.	9.	0.	0.	0.	.00000000	.00022243	.00000000
66.	116	8.	23.	0.	1.	1.	.04347826	.00056843	.00002471
67.	117	12.	46.	0.	0.	0.	.00000000	.00113687	.00000000
68.	118	15.	46.	0.	0.	0.	.00000000	.00113687	.00000000
69.	119	9.	34.	0.	0.	0.	.00000000	.00084039	.00000000
70.	120	16.	80.	0.	0.	0.	.00000000	.00197716	.00000000
71.	121	13.	64.	1.	3.	4.	.06250000	.00158173	.00009086
72.	122	5.	40.	0.	0.	0.	.00000000	.00098858	.00000000
73.	123	3.	18.	0.	0.	0.	.00000000	.00044486	.00000000
74.	124	7.	7.	0.	0.	0.	.00000000	.00017300	.00000000
75.	125	25.	25.	0.	0.	0.	.00000000	.00061786	.00000000
76.	126	13.	13.	1.	0.	1.	.07692303	.00032129	.00002471
77.	127	18.	18.	0.	0.	0.	.00000000	.00044486	.00000000
78.	128	10.	10.	0.	0.	0.	.00000000	.00024715	.00000000
79.	143	5.	14.	0.	0.	0.	.00000000	.00034600	.00000000
80.	151	14.	31.	0.	0.	0.	.00000000	.00076615	.00000000

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TOTAL PARAGRAPHS AND LOSS PARAGRAPHS CAPITAL GAIN

IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
81.	152	30.	44.	74.	0.	0.	.00000000	.00182888	.00000000
82.	153	5.	3.	8.	0.	0.	.00000000	.00019772	.00000000
83.	161	1.	1.	2.	0.	0.	.00000000	.00004943	.00000000
84.	162	19.	144.	163.	2.	7.	.05521472	.00402847	.00022243
85.	163	32.	46.	78.	2.	0.	.02564103	.00192773	.00004943
86.	164	30.	76.	106.	0.	0.	.00000000	.00261974	.00000000
87.	165	21.	131.	152.	10.	23.	.1513179	.00375661	.00056843
88.	166	23.	80.	103.	5.	21.	.20388350	.00254560	.00051901
89.	167	95.	716.	811.	8.	8.	.00984436	.02004350	.00019772
90.	169	22.	75.	97.	1.	1.	.01030928	.00239731	.00002471
91.	170	89.	566.	655.	15.	131.	.20000000	.01618803	.00033761
92.	171	15.	72.	87.	1.	1.	.01149425	.00215017	.00002471
93.	172	58.	241.	299.	2.	22.	.07357860	.00738965	.00054372
94.	173	1.	8.	9.	0.	0.	.00000000	.00022743	.00000000
95.	174	13.	35.	48.	1.	1.	.02083333	.00118630	.00002471
96.	175	13.	38.	51.	0.	2.	.03921569	.00126044	.00004943
97.	176	1.	0.	1.	0.	0.	.00000000	.00002471	.00000000
98.	177	7.	14.	21.	0.	0.	.00000000	.00051901	.00000000
99.	178	7.	32.	39.	0.	0.	.00000000	.00097697	.00000000
100.	179	19.	33.	52.	0.	0.	.00000000	.00128516	.00000000
101.	180	3.	6.	9.	1.	1.	.11111111	.00022243	.00002471
102.	182	11.	22.	33.	3.	3.	.09090909	.00061558	.00007414
103.	183	9.	58.	67.	10.	10.	.14925373	.00165587	.00024715
104.	184	20.	0.	20.	1.	1.	.05000000	.00049429	.00002471
105.	185	24.	31.	55.	1.	2.	.03636364	.00135930	.00004943
106.	186	16.	23.	38.	0.	0.	.00000000	.00093915	.00000000
107.	188	5.	43.	48.	1.	1.	.02083333	.00118630	.00002471
108.	189	18.	0.	18.	1.	1.	.05555556	.00044466	.00002471
109.	190	7.	87.	94.	0.	0.	.00000000	.00232317	.00000000
110.	191	18.	39.	57.	1.	2.	.03508772	.00140673	.00004943
111.	192	16.	0.	16.	0.	0.	.00000000	.00037543	.00000000
112.	211	1.	1.	2.	0.	0.	.00000000	.00004943	.00000000
113.	212	3.	18.	21.	1.	1.	.04731705	.00051901	.00002471
114.	213	15.	104.	115.	0.	0.	.00000000	.00274103	.00000000
115.	215	2.	6.	8.	0.	0.	.00000000	.00019772	.00000000
116.	216	17.	36.	53.	0.	0.	.00000000	.00130987	.00000000
117.	217	46.	126.	172.	0.	2.	.01162791	.00425090	.00004943
118.	219	28.	40.	68.	0.	0.	.00000000	.00168059	.00000000
119.	220	27.	0.	27.	0.	0.	.00000000	.00066729	.00000000
120.	221	2.	0.	2.	0.	2.	1.00000000	.00004943	.00004943

IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
121.	241	1.	2.	0.	0.	0.	.00000000	.00004743	.00000000
122.	243	25.	145.	0.	0.	0.	.01379310	.00350361	.00004943
123.	244	6.	11.	0.	0.	0.	.00000000	.00027184	.00000000
124.	245	9.	17.	0.	0.	0.	.03046154	.00064258	.00002471
125.	246	11.	31.	1.	1.	3.	.09677419	.00076615	.00007414
126.	247	9.	20.	0.	0.	1.	.05000000	.00045429	.00002471
127.	248	5.	14.	0.	0.	0.	.00000000	.00034600	.00000000
128.	249	3.	19.	0.	0.	1.	.05263158	.00046978	.00002471
129.	250	6.	21.	2.	2.	2.	.09523810	.00251901	.00004943
130.	261	1.	2.	0.	0.	0.	.00000000	.00004943	.00000000
131.	262	1.	21.	1.	1.	1.	.04545455	.00054372	.00002471
132.	263	13.	71.	0.	0.	1.	.01400451	.00175373	.00002471
133.	264	9.	32.	0.	0.	0.	.00000000	.00079067	.00000000
134.	265	4.	22.	0.	0.	1.	.04545455	.00054372	.00002471
135.	266	1.	28.	1.	1.	1.	.03571429	.00069201	.00002471
136.	267	22.	64.	2.	2.	3.	.04687500	.00158173	.00007414
137.	268	1.	2.	1.	1.	2.	1.00000000	.00004943	.00004943
138.	269	5.	29.	0.	0.	4.	.13793103	.00071672	.00009886
139.	271	8.	12.	0.	0.	0.	.00000000	.00027657	.00000000
140.	272	1.	10.	0.	0.	8.	.80000000	.00024715	.00019772
141.	273	1.	2.	0.	0.	0.	.00000000	.00004943	.00000000
142.	274	52.	275.	1.	1.	1.	.00363636	.00679650	.00002471
143.	275	10.	11.	0.	0.	0.	.00000000	.00027186	.00000000
144.	276	10.	29.	0.	0.	0.	.00000000	.00071672	.00000000
145.	277	4.	30.	0.	0.	0.	.00000000	.00074144	.00000000
146.	278	5.	18.	0.	0.	0.	.00000000	.00044486	.00000000
147.	279	36.	144.	1.	1.	1.	.00694444	.00355889	.00002471
148.	280	4.	4.	0.	0.	0.	.00000000	.00009886	.00000000
149.	280A	30.	30.	1.	1.	1.	.03333333	.00074144	.00002471
150.	280B	5.	5.	0.	0.	0.	.00000000	.00013357	.00000000
151.	280C	2.	4.	0.	0.	0.	.00000000	.00009886	.00000000
152.	281	18.	74.	3.	3.	3.	.04054054	.00182888	.00007414
153.	301	27.	81.	12.	12.	14.	.17283951	.00200188	.00034600
154.	302	22.	43.	20.	20.	35.	.81395349	.00106273	.00086501
155.	303	19.	33.	14.	14.	29.	.87678788	.00081558	.00071672
156.	304	10.	21.	11.	11.	21.	1.00000000	.00051901	.00051901
157.	305	17.	137.	113.	113.	122.	.89051095	.00336589	.00301517
158.	306	37.	61.	24.	24.	61.	1.00000000	.00150759	.00150759
159.	307	6.	9.	1.	1.	1.	.11111111	.00022243	.00002471
160.	311	24.	69.	12.	12.	13.	.18640580	.00170530	.00032129

IRC

SECTION

CODE

REGULATION

TOTAL

CODE

REGULATION

TOTAL

TOTAL

COMPLEXITY

AVERAGE

SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	COMPLEXITY	COMPLEXITY	AVERAGE
161.	312	39.	72.	0.	3.	3.	.02702703	.00274331	.00007414
162.	316	9.	40.	0.	1.	1.	.02040816	.00121101	.00002471
163.	317	2.	1.	1.	0.	1.	.33333333	.00007414	.00002471
164.	318	25.	24.	3.	2.	5.	.10204082	.00121101	.00012357
165.	331	4.	5.	3.	4.	7.	.77777772	.00022243	.00017300
166.	332	7.	19.	0.	3.	3.	.11538462	.00064258	.00007414
167.	333	10.	67.	4.	39.	43.	.55044156	.00190302	.00106273
168.	334	14.	47.	1.	0.	1.	.01639344	.00150759	.00002471
169.	336	1.	1.	1.	1.	2.	.00000000	.00004943	.00004943
170.	337	19.	38.	5.	8.	13.	.23807018	.00140823	.00032129
171.	338	1.	0.	0.	0.	0.	.00000000	.00002471	.00000000
172.	341	77.	174.	77.	174.	251.	1.00000000	.00620335	.00230335
173.	346	5.	19.	5.	17.	22.	.91666666	.00593315	.00054372
174.	351	12.	47.	3.	1.	4.	.06772661	.00145816	.00009866
175.	354	9.	10.	1.	1.	2.	.10526316	.00046958	.00004943
176.	355	20.	57.	10.	26.	36.	.46753247	.00190302	.00088972
177.	356	15.	21.	4.	12.	16.	.44444444	.00086972	.00039543
178.	357	14.	8.	1.	3.	4.	.18181818	.00054372	.00009866
179.	358	16.	25.	2.	2.	4.	.09756098	.00101330	.00009866
180.	361	5.	1.	1.	0.	1.	.16666667	.00014829	.00002471
181.	362	8.	10.	0.	0.	0.	.00000000	.00044486	.00000000
182.	367	11.	270.	2.	213.	215.	.76517455	.00694479	.00531363
183.	368	23.	41.	4.	2.	6.	.09375000	.00158173	.00014829
184.	371	8.	22.	0.	3.	3.	.10000000	.00074144	.00007414
185.	372	11.	6.	0.	0.	0.	.00000000	.00042015	.00000000
186.	374	28.	14.	0.	1.	1.	.02380952	.00103801	.00002471
187.	381	41.	507.	3.	41.	44.	.08029197	.01354357	.00106744
188.	382	49.	131.	1.	1.	2.	.01111111	.00444862	.00004943
189.	383	2.	23.	1.	3.	4.	.16000000	.00061786	.00009866
190.	385	5.	235.	1.	9.	10.	.04166667	.00593149	.00024715
191.	401	127.	737.	1.	0.	1.	.00115473	.02140280	.00002471
192.	402	69.	257.	9.	54.	63.	.19325153	.00805694	.00159702
193.	403	33.	117.	4.	26.	30.	.20000000	.00370718	.00074144
194.	404	47.	233.	0.	0.	0.	.00000000	.00592007	.00000000
195.	405	16.	32.	2.	3.	5.	.10416667	.00118630	.00012357
196.	406	22.	27.	4.	5.	9.	.18367317	.00121101	.00022243
197.	407	23.	29.	4.	4.	8.	.15384615	.00138516	.00019772
198.	408	80.	138.	1.	0.	1.	.00458716	.00538777	.00002471
199.	409	16.	11.	0.	1.	1.	.03703704	.00066729	.00002471
200.	409A	41.	0.	0.	0.	0.	.00000000	.00101330	.00000000

UN

IRC SECTION TOTAL REGULATION TOTAL CODE REGULATION TOTAL CAPITA GAINS COMPLEXITY TOTAL COMPLEXITY WEIGHTED AVERAGE

201.	410	31.	107.	138.	0.	0.	0.	.00000000	.00341061	.00000000
202.	411	96.	310.	406.	0.	0.	0.	.00000000	.01003411	.00000000
203.	412	67.	164.	231.	0.	0.	0.	.00000000	.00570906	.00000000
204.	413	18.	33.	248.	0.	0.	0.	.00000000	.00126044	.00000000
205.	414	32.	216.	302.	0.	0.	0.	.00000000	.00612921	.00000000
206.	415	81.	301.	210.	0.	0.	0.	.00000000	.00944076	.00000000
207.	421	9.	201.	85.	16.	16.	9.	.07619048	.00519005	.00039543
208.	422	28.	57.	87.	1.	8.	9.	.10509235	.00210074	.00022243
209.	423	22.	65.	63.	3.	6.	11.	.10344828	.00215017	.00022243
210.	424	17.	46.	71.	5.	6.	1.	.17460318	.00155702	.00027186
211.	425	24.	47.	56.	1.	0.	0.	.01408451	.00175473	.00062471
212.	441	20.	36.	19.	0.	0.	0.	.00000000	.00130401	.00000000
213.	442	1.	18.	53.	1.	1.	1.	.05263158	.00106744	.00002471
214.	443	19.	34.	44.	0.	0.	0.	.01683792	.00130987	.00000000
215.	446	9.	35.	29.	0.	0.	0.	.00000000	.00071672	.00000000
216.	447	29.	0.	184.	1.	1.	2.	.00000000	.00454748	.00004943
217.	451	6.	178.	185.	3.	13.	18.	.09289730	.00457219	.00044866
218.	453	27.	158.	19.	0.	2.	2.	.10526316	.00046758	.00004943
219.	454	3.	14.	41.	0.	0.	0.	.00000000	.00101330	.00000000
220.	455	13.	28.	60.	0.	0.	0.	.00000000	.00148287	.00000000
221.	456	15.	45.	33.	0.	0.	0.	.00000000	.00081558	.00000000
222.	457	33.	0.	36.	0.	0.	0.	.00000000	.00089972	.00000000
223.	458	30.	6.	104.	0.	0.	0.	.00000000	.00357031	.00000000
224.	461	15.	89.	26.	0.	0.	0.	.00000000	.00064258	.00000000
225.	463	13.	13.	15.	0.	0.	0.	.00000000	.00037072	.00000000
226.	464	15.	0.	260.	4.	6.	10.	.03846154	.00642578	.00024715
227.	465	37.	223.	33.	0.	0.	0.	.00000000	.00081558	.00000000
228.	466	33.	0.	139.	0.	0.	0.	.00000000	.00313532	.00000000
229.	471	1.	138.	137.	0.	0.	0.	.00000000	.00336589	.00000000
230.	472	9.	128.	104.	0.	1.	1.	.00261538	.00257631	.0002471
231.	481	10.	94.	176.	0.	15.	15.	.08522727	.00434976	.00037072
232.	482	1.	175.	196.	7.	170.	177.	.70306123	.00484405	.00437447
233.	483	14.	182.	303.	1.	3.	4.	.01320132	.00748651	.00009886
234.	501	86.	217.	16.	1.	0.	1.	.05250000	.00039543	.0002471
235.	502	4.	12.	121.	2.	0.	2.	.01652893	.00299046	.0003943
236.	503	22.	99.	15.	0.	3.	3.	.20000000	.00037072	.00037414
237.	504	4.	11.	230.	1.	0.	1.	.00434783	.00528435	.0002471
238.	507	22.	208.	129.	0.	0.	0.	.00000000	.00318818	.00000000
239.	508	17.	112.	255.	1.	0.	1.	.00392157	.00630221	.0002471
240.	509	19.	236.							

TOTAL PARAGRAPHS AND LOSS PARAGRAPHS

IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
241.	511	9.	21.	30.	1.	3.	.10000000	.00074144	.00007414
242.	512	46.	187.	233.	2.	4.	.01716738	.00575849	.00009886
243.	513	26.	47.	73.	1.	1.	.01359853	.00180416	.00002471
244.	514	38.	200.	238.	1.	15.	.06302521	.00588206	.00037072
245.	515	1.	0.	1.	0.	0.	.00000000	.00002471	.00000000
246.	521	6.	37.	43.	0.	0.	.00000000	.00106273	.00000000
247.	526	1.	0.	1.	0.	1.	1.00000000	.00002471	.00002471
248.	527	29.	63.	92.	11.	15.	.16304348	.00227374	.00227072
249.	528	24.	38.	62.	1.	3.	.04838710	.00153230	.00007414
250.	531	2.	1.	3.	0.	0.	.00000000	.00007414	.00000000
251.	532	4.	4.	8.	1.	4.	.50000000	.00019772	.00009886
252.	533	2.	11.	13.	1.	7.	.53846154	.06632129	.00017100
253.	534	5.	12.	17.	0.	0.	.00000000	.00043015	.00000000
254.	535	15.	29.	44.	5.	17.	.35353534	.00108744	.00012015
255.	536	1.	1.	2.	0.	0.	.00000000	.00004943	.00000000
256.	537	9.	37.	46.	4.	4.	.09695682	.00113687	.00009886
257.	541	1.	4.	5.	0.	0.	.00000000	.00012357	.00000000
258.	542	31.	71.	102.	6.	13.	.12745078	.00257068	.00032127
259.	543	49.	163.	212.	21.	50.	.3584906	.00233748	.00123573
260.	544	12.	29.	41.	0.	0.	.00000000	.00101330	.00000000
261.	545	25.	104.	129.	2.	13.	.10077519	.00316616	.00033129
262.	546	1.	0.	1.	0.	0.	.00000000	.00002471	.00000000
263.	547	14.	28.	42.	0.	0.	.00000000	.00103801	.00000000
264.	551	7.	13.	20.	1.	5.	.25000000	.00149429	.00012357
265.	552	4.	24.	28.	1.	2.	.07142857	.00069201	.00004943
266.	553	10.	23.	33.	6.	13.	.37373739	.00081558	.00032129
267.	554	11.	23.	34.	0.	0.	.00000000	.00084029	.00000000
268.	555	4.	15.	19.	1.	2.	.10526316	.00046958	.00004943
269.	556	9.	40.	49.	0.	5.	.10204082	.00121101	.00012357
270.	557	1.	0.	1.	0.	0.	.00000000	.00002471	.00000000
271.	558	1.	0.	1.	0.	0.	.00000000	.00002471	.00000000
272.	561	4.	14.	18.	0.	0.	.00000000	.00044486	.00000000
273.	562	6.	28.	34.	1.	15.	.44117647	.00084029	.00037072
274.	563	5.	3.	8.	0.	0.	.00000000	.00019772	.00000000
275.	564	6.	10.	16.	0.	0.	.00000000	.00039543	.00000000
276.	565	9.	28.	37.	0.	4.	.10810811	.00091444	.00009886
277.	581	1.	5.	6.	1.	1.	.16666667	.00014829	.00002471
278.	582	7.	19.	26.	7.	24.	.92307692	.00043256	.00059315
279.	584	18.	40.	58.	6.	23.	.39655172	.00143344	.00050043
280.	585	18.	86.	104.	0.	0.	.00000000	.00257031	.00000000

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IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
261.	586	7.	19.	0.	2.	2.	.07692308	.00064258	.00004943
262.	591	1.	6.	0.	0.	0.	.00000000	.00017300	.00000000
263.	593	40.	210.	2.	3.	10.	.04000000	.00617864	.00024715
264.	594	4.	8.	1.	1.	2.	.16666667	.00029657	.00004943
265.	595	4.	28.	1.	6.	9.	.28125000	.00029087	.00000000
266.	596	1.	3.	0.	0.	0.	.00000000	.00005686	.00000000
267.	611	6.	120.	0.	2.	2.	.01557302	.00311403	.00004943
268.	612	1.	47.	1.	7.	8.	.16566667	.00118630	.00019772
269.	613	35.	240.	1.	11.	12.	.04563636	.00679650	.00029657
290.	613A	60.	148.	1.	5.	6.	.02084615	.00514063	.00014829
291.	614	27.	219.	0.	13.	13.	.05284553	.00607978	.00032129
292.	616	3.	15.	0.	1.	1.	.05555556	.00044466	.00002471
293.	617	35.	146.	14.	40.	54.	.36986301	.00360632	.00133459
294.	621	1.	17.	0.	0.	0.	.00000000	.00044486	.00000000
295.	631	5.	53.	5.	53.	58.	1.00000000	.00143344	.00143344
296.	636	5.	41.	1.	3.	4.	.08695652	.00113667	.00009866
297.	638	3.	21.	0.	0.	0.	.00000000	.00059315	.00000000
298.	641	7.	15.	2.	2.	4.	.18181818	.00054372	.00009866
299.	642	28.	179.	3.	21.	24.	.11594203	.00511591	.00059315
300.	643	12.	54.	1.	22.	23.	.34848485	.00163116	.00056843
301.	644	25.	0.	20.	0.	20.	.80000000	.00061766	.00049429
302.	651	3.	11.	0.	1.	1.	.07142857	.00034600	.00002471
303.	652	3.	24.	1.	10.	11.	.40740741	.00066729	.00027186
304.	661	5.	21.	1.	7.	8.	.30769231	.0004258	.00019772
305.	662	6.	36.	1.	18.	19.	.45236095	.00103601	.00046958
306.	663	6.	58.	0.	2.	2.	.03125000	.00153173	.00004943
307.	664	16.	161.	3.	14.	17.	.02044520	.00437447	.00042015
308.	665	11.	95.	1.	48.	49.	.46226415	.00261974	.00121101
309.	666	5.	39.	0.	6.	6.	.13616364	.00103744	.00014829
310.	667	26.	13.	0.	5.	5.	.12620513	.00096387	.00012357
311.	668	6.	58.	0.	15.	15.	.23437500	.00153173	.00037072
312.	671	1.	24.	0.	8.	8.	.52000000	.00041786	.00017772
313.	672	5.	7.	0.	1.	1.	.08333333	.00026657	.00002471
314.	673	3.	15.	1.	1.	2.	.11111111	.00044486	.00004943
315.	674	16.	36.	0.	3.	5.	.09615385	.00128516	.00012357
316.	675	4.	10.	0.	0.	0.	.00000000	.00034600	.00000000
317.	676	2.	2.	1.	1.	1.	.25000000	.00067886	.00002471
318.	677	4.	23.	0.	5.	5.	.18518518	.00064729	.00012357
319.	678	5.	7.	0.	1.	1.	.08333333	.00029657	.00002471
320.	679	12.	0.	1.	0.	1.	.08333333	.00029657	.00002471

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TOTAL PARAGRAPHS  
AND LOSS PARAGRAPHS

IRC

TOTAL PARAGRAPHS  
AND LOSS PARAGRAPHS

SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
321.	681	2.	16.	0.	8.	8.	.44444444	.00044444	.00019772
322.	682	3.	12.	0.	2.	2.	.13333333	.00033333	.00004943
323.	683	2.	11.	1.	1.	2.	.18181818	.00027186	.00004943
324.	691	32.	91.	3.	7.	10.	.08130081	.00030989	.00024715
325.	692	6.	19.	0.	0.	0.	.00000000	.00000000	.00000000
326.	701	1.	2.	0.	0.	0.	.00000000	.00000000	.00000000
327.	702	10.	33.	4.	10.	14.	.42424243	.00061578	.00034600
328.	703	8.	22.	1.	3.	4.	.18181818	.00054372	.00009886
329.	704	12.	82.	4.	10.	14.	.17071171	.00202659	.00034600
330.	705	13.	23.	2.	1.	3.	.13043478	.00056843	.00007414
331.	706	9.	42.	0.	3.	3.	.07142857	.00103801	.00007414
332.	707	9.	20.	7.	5.	12.	.60000000	.00047429	.00029657
333.	708	5.	13.	0.	1.	1.	.05555556	.00044466	.00002471
334.	709	5.	14.	0.	0.	0.	.00000000	.00034600	.00000000
335.	721	2.	5.	1.	2.	3.	.60000000	.00013357	.00007414
336.	722	3.	4.	0.	1.	1.	.25000000	.00009886	.00002471
337.	723	1.	2.	0.	1.	1.	.50000000	.00004743	.00002471
338.	731	6.	20.	5.	10.	15.	.75000000	.00049429	.00037072
339.	732	7.	41.	3.	14.	17.	.41463415	.00101330	.00043015
340.	733	3.	4.	0.	1.	1.	.25000000	.00009886	.00002471
341.	734	8.	26.	1.	2.	3.	.11538462	.00064250	.00007414
342.	735	3.	7.	3.	4.	7.	1.00000000	.00017300	.00017300
343.	736	8.	34.	3.	11.	14.	.41176471	.00064029	.00034600
344.	741	1.	4.	1.	2.	3.	.75000000	.00009886	.00007414
345.	742	1.	2.	0.	0.	0.	.00000000	.00004943	.00000000
346.	743	5.	28.	1.	5.	6.	.21428571	.00069201	.00014829
347.	751	18.	100.	18.	82.	100.	1.00000000	.00247145	.00247145
348.	752	4.	13.	1.	0.	1.	.07692308	.0002129	.00002471
349.	753	1.	5.	0.	1.	1.	.20000000	.00012357	.00002471
350.	754	1.	5.	0.	0.	0.	.00000000	.00012357	.00000000
351.	755	6.	20.	3.	14.	17.	.85000000	.00049429	.00042015
352.	761	7.	27.	1.	0.	1.	.03703704	.00066729	.00002471
353.	801	43.	180.	1.	13.	14.	.07777778	.00444362	.00034600
354.	802	7.	40.	5.	13.	16.	.45000000	.00098858	.00044858
355.	804	30.	61.	6.	6.	12.	.14814815	.00200188	.00029657
356.	805	31.	100.	0.	0.	0.	.00000000	.00247145	.00000000
357.	806	4.	19.	0.	0.	0.	.00000000	.00043958	.00000000
358.	809	45.	137.	5.	10.	15.	.10946905	.00385589	.00037072
359.	810	15.	65.	2.	1.	3.	.04615385	.00160645	.00007414
360.	811	5.	23.	0.	0.	0.	.00000000	.00056843	.00000000

TOTAL PARAGRAPHS  
AND LOSS PARAGRAPHS

IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
361.	812	13.	66.	0.	3.	3.	.03797468	.00195245	.00007414
362.	815	50.	67.	2.	6.	8.	.0637707	.00239160	.00019772
363.	817	13.	57.	13.	57.	70.	1.00000000	.00173002	.00017002
364.	818	18.	78.	2.	10.	12.	.12500000	.00272260	.00029657
365.	819	15.	43.	0.	1.	1.	.01224138	.00143344	.0002471
366.	819A	19.	0.	1.	0.	1.	.05253158	.00046958	.0002471
367.	820	15.	28.	1.	3.	4.	.05070709	.00103744	.0002966
368.	821	20.	67.	1.	10.	11.	.12613678	.0015017	.00027186
369.	822	26.	85.	4.	24.	28.	.25225225	.00274331	.00062201
370.	823	8.	26.	0.	5.	5.	.14705882	.00084029	.00012357
371.	824	27.	42.	0.	0.	0.	.00000000	.00170530	.00060930
372.	825	17.	37.	0.	1.	1.	.01351852	.00133459	.0002471
373.	826	11.	60.	0.	1.	1.	.01400851	.00175473	.0002471
374.	831	8.	17.	1.	0.	1.	.01000000	.00061786	.0002471
375.	832	40.	24.	4.	4.	8.	.12500000	.00196173	.00019772
376.	841	4.	0.	0.	0.	0.	.00000000	.00009886	.00000000
377.	842	1.	0.	1.	0.	1.	1.00000000	.0002471	.00062471
378.	843	1.	0.	0.	0.	0.	.00000000	.0002471	.00060000
379.	844	6.	0.	0.	0.	0.	.00000000	.00014829	.00060000
380.	851	28.	62.	2.	9.	11.	.12222222	.00222431	.00027186
381.	852	34.	125.	17.	84.	101.	.63522013	.00392961	.0024717
382.	853	11.	19.	0.	0.	0.	.00000000	.00074144	.00000000
383.	854	6.	10.	3.	4.	7.	.43750000	.00039543	.00017300
384.	855	5.	10.	1.	5.	6.	.40000000	.00037072	.00014829
385.	856	70.	174.	10.	11.	21.	.08506557	.00503035	.00051901
386.	857	48.	68.	16.	37.	55.	.47008547	.00289160	.00135930
387.	858	4.	9.	1.	5.	6.	.46153846	.00032129	.00014829
388.	859	2.	21.	0.	1.	1.	.04347826	.00056843	.0002471
389.	860	30.	58.	5.	1.	6.	.10344828	.00143344	.00014829
390.	861	44.	384.	2.	16.	18.	.04205607	.01057783	.00044466
391.	862	9.	15.	2.	6.	8.	.33333333	.00079315	.00019772
392.	863	5.	46.	2.	2.	4.	.07813137	.00126044	.00009886
393.	864	28.	189.	13.	44.	57.	.26267281	.00536306	.00140873
394.	871	28.	132.	11.	33.	44.	.27500000	.00395433	.00168744
395.	872	9.	23.	0.	1.	1.	.02125000	.00079007	.0002471
396.	873	6.	18.	0.	5.	5.	.20833333	.00059315	.00012357
397.	874	3.	4.	0.	0.	0.	.00000000	.00017300	.00000000
398.	875	2.	2.	1.	0.	1.	.25000000	.00099686	.0002471
399.	876	2.	4.	0.	1.	1.	.16666667	.00014829	.0002471
400.	877	9.	0.	3.	0.	3.	.33333333	.00022243	.00007414

401.	878	1.	0.	1.	0.	0.	0.	0.	0.0000000	.0002471	.00000000	.00000000
402.	879	9.	15.	24.	1.	1.	1.	1.	.00333333	.00059315	.00004943	.00004943
403.	881	8.	30.	38.	6.	9.	9.	15.	.39473684	.00093915	.00037072	.00037072
404.	882	15.	43.	58.	3.	4.	4.	7.	.12068785	.00143344	.00017300	.00017300
405.	883	5.	6.	11.	0.	0.	0.	0.	.00000000	.00027186	.00000000	.00000000
406.	884	5.	0.	5.	0.	0.	0.	0.	.00000000	.00012357	.00000000	.00000000
407.	891	1.	0.	1.	0.	0.	0.	0.	.00000000	.00022471	.00000000	.00000000
408.	892	1.	37.	38.	0.	0.	0.	0.	.00000000	.00073915	.00000000	.00000000
409.	893	5.	19.	24.	0.	0.	0.	0.	.00000000	.00093315	.00000000	.00000000
410.	894	2.	10.	12.	1.	1.	1.	2.	.16625657	.00025657	.00001943	.00001943
411.	895	1.	8.	9.	0.	0.	0.	0.	.00000000	.00022243	.00000000	.00000000
412.	896	10.	0.	10.	0.	0.	0.	0.	.00000000	.00024715	.00000000	.00000000
413.	901	29.	176.	205.	1.	2.	2.	3.	.01463415	.00506648	.00007414	.00007414
414.	902	10.	58.	68.	1.	2.	2.	3.	.04411785	.00168059	.00007414	.00007414
415.	903	1.	18.	19.	0.	0.	0.	0.	.00000000	.00046758	.00000000	.00000000
416.	904	55.	231.	286.	17.	6.	6.	23.	.08041758	.00706836	.00056843	.00056843
417.	905	6.	25.	31.	0.	0.	0.	0.	.00000000	.00076515	.00000000	.00000000
418.	906	7.	0.	7.	0.	0.	0.	0.	.00000000	.00017300	.00000000	.00000000
419.	907	46.	0.	46.	1.	0.	0.	1.	.02173913	.00113687	.00002471	.00002471
420.	908	4.	0.	4.	0.	0.	0.	0.	.00000000	.00009806	.00000000	.00000000
421.	911	20.	67.	87.	0.	0.	0.	0.	.00000000	.00215017	.00000000	.00000000
422.	912	11.	3.	14.	0.	0.	0.	0.	.00000000	.00034600	.00000000	.00000000
423.	913	68.	131.	199.	0.	0.	0.	0.	.00000000	.00491819	.00000000	.00000000
424.	921	3.	9.	12.	1.	0.	0.	1.	.06333333	.00029877	.00002471	.00002471
425.	922	5.	11.	16.	0.	1.	1.	1.	.06250000	.00035043	.00002471	.00002471
426.	931	13.	21.	34.	2.	0.	0.	2.	.05882353	.00084029	.00004943	.00004943
427.	932	3.	3.	6.	0.	0.	0.	0.	.00000000	.00014529	.00000000	.00000000
428.	933	2.	3.	59.	0.	0.	0.	0.	.00000000	.00012357	.00000000	.00000000
429.	934	6.	53.	59.	0.	2.	2.	2.	.03389831	.00146816	.00004943	.00004943
430.	935	16.	37.	53.	0.	1.	1.	1.	.01836792	.00130987	.00002471	.00002471
431.	936	22.	4.	26.	2.	0.	0.	2.	.07872368	.00064258	.00004943	.00004943
432.	951	14.	39.	53.	0.	1.	1.	1.	.01836792	.00130767	.00002471	.00002471
433.	952	13.	129.	142.	0.	5.	5.	5.	.03521127	.00350947	.00012357	.00012357
434.	953	17.	120.	137.	2.	3.	3.	5.	.03649435	.00330589	.00012357	.00012357
435.	954	79.	378.	416.	2.	16.	16.	18.	.04226733	.01028126	.00044466	.00044466
436.	955	13.	304.	317.	0.	10.	10.	10.	.03154574	.00783451	.00024715	.00024715
437.	956	21.	63.	84.	0.	2.	2.	2.	.02380752	.00207602	.00004943	.00004943
438.	957	8.	57.	65.	1.	0.	0.	1.	.01533422	.00160645	.00002471	.00002471
439.	958	9.	44.	53.	0.	0.	0.	0.	.00000000	.00130987	.00000000	.00000000
440.	959	8.	75.	83.	0.	2.	2.	2.	.02407639	.00205131	.00004943	.00004943

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IRC SECTION	CODE	REGULATION	TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS COMPLEXITY	TOTAL COMPLEXITY	WEIGHTED AVERAGE
441.	960	15.	100.	0.	0.	0.	.00000000	.00247145	.00000000
442.	961	3.	29.	1.	0.	1.	.03446276	.00071672	.00002471
443.	962	5.	56.	0.	4.	4.	.07142857	.00138461	.00009886
444.	964	4.	228.	224.	0.	2.	.00077193	.00563492	.0001943
445.	970	14.	81.	0.	0.	0.	.00000000	.00200189	.00000000
446.	971	20.	72.	52.	1.	1.	.01388889	.00177545	.00002471
447.	991	1.	13.	12.	0.	1.	.07622308	.00032129	.00002471
448.	992	32.	128.	96.	0.	0.	.00000000	.00316316	.00000000
449.	993	59.	428.	369.	2.	3.	.00700935	.01057783	.00007414
450.	994	7.	117.	110.	0.	0.	.00000000	.00289160	.00000000
451.	995	62.	203.	141.	5.	27.	.15300473	.00501705	.00066229
452.	996	20.	118.	98.	1.	25.	.21184441	.00291432	.00066229
453.	997	3.	5.	2.	1.	3.	.60000000	.00012357	.00007414
454.	999	3.	78.	55.	0.	0.	.00000000	.00192773	.00000000
455.	1001	23.	43.	31.	1.	10.	.23255814	.00106223	.00024715
456.	1011	12.	25.	23.	0.	18.	.72000000	.00061786	.00044406
457.	1012	1.	63.	62.	1.	23.	.36507937	.00155702	.00016843
458.	1013	1.	2.	1.	0.	0.	.00000000	.00004943	.00000000
459.	1014	18.	95.	77.	2.	10.	.10528315	.00234788	.00024715
460.	1015	13.	53.	40.	1.	5.	.09433762	.00130987	.00012357
461.	1016	43.	131.	88.	3.	13.	.09723664	.00323751	.00012357
462.	1017	1.	20.	19.	1.	4.	.20000000	.00047429	.00009006
463.	1018	1.	2.	1.	0.	0.	.00000000	.00004943	.00000000
464.	1019	1.	2.	1.	1.	2.	1.00000000	.00004943	.0001943
465.	1021	1.	2.	1.	1.	2.	1.00000000	.00004943	.0001943
466.	1023	53.	94.	41.	2.	4.	.04255319	.00232317	.00009886
467.	1024	3.	3.	0.	0.	0.	.00000000	.00007414	.00000000
468.	1031	5.	40.	35.	2.	12.	.30000000	.00098858	.00029657
469.	1032	2.	6.	4.	0.	0.	.00000000	.00014829	.00000000
470.	1033	29.	74.	45.	5.	14.	.1891819	.00182848	.00031600
471.	1034	30.	60.	50.	3.	9.	.11250000	.00197716	.00022243
472.	1035	8.	11.	3.	2.	3.	.27272727	.00027136	.00007414
473.	1036	3.	6.	3.	2.	4.	.66666666	.00014829	.00009886
474.	1037	7.	69.	62.	6.	43.	.62315841	.00170530	.00106273
475.	1038	20.	108.	88.	15.	31.	.28703701	.00266917	.00076615
476.	1039	16.	47.	31.	2.	4.	.08510638	.00116158	.00009886
477.	1040	4.	4.	0.	0.	2.	.50000000	.00009886	.00009886
478.	1051	1.	5.	4.	1.	2.	.40000000	.00012357	.00004943
479.	1052	3.	6.	3.	0.	0.	.00000000	.00014829	.00000000
480.	1053	1.	7.	6.	0.	1.	.14285714	.00017300	.00002471

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TOTAL PARAGRAPHS AND LOSS PARAGRAPHS

IRC SECTION	TOTAL PARAGRAPHS		REGULATION		TOTAL	CAPITAL GAIN AND LOSS PARAGRAPHS		TOTAL COMPLEXITY	WEIGHTED AVERAGE
	CODE	REGULATION	TOTAL	CODE		REGULATION	TOTAL		
481.	1054	1.	2.	3.	0.	0.	.00000000	.00007414	.00000000
482.	1055	9.	15.	24.	1.	0.	.04186667	.00059315	.00002471
483.	1056	9.	0.	9.	0.	0.	.55555555	.00022243	.00012357
484.	1057	3.	0.	3.	0.	0.	1.00000000	.00007414	.00007414
485.	1058	6.	0.	6.	0.	0.	.00000000	.00014029	.00000000
486.	1059	3.	0.	3.	0.	0.	1.00000000	.00007414	.00007414
487.	1071	3.	23.	26.	4.	2.	.15384615	.00064208	.00009886
488.	1081	16.	99.	115.	14.	8.	.12173913	.00264217	.00034600
489.	1082	19.	28.	47.	4.	2.	.08510638	.00116190	.00005086
490.	1083	13.	25.	38.	0.	0.	.00000000	.00093915	.00000000
491.	1091	4.	14.	18.	5.	3.	.27777778	.00044486	.00012357
492.	1101	52.	19.	71.	20.	5.	.28189014	.00175473	.00049429
493.	1102	10.	24.	34.	5.	2.	.14705882	.00084029	.00012357
494.	1103	22.	17.	39.	1.	0.	.02564103	.00096387	.00002471
495.	1201	11.	47.	58.	58.	47.	1.00000000	.00143344	.00143344
496.	1202	7.	3.	10.	10.	3.	1.00000000	.00024715	.00024715
497.	1211	9.	39.	48.	48.	39.	1.00000000	.00118630	.00118630
498.	1212	23.	60.	83.	63.	60.	1.00000000	.00205131	.00205131
499.	1221	11.	10.	21.	21.	10.	1.00000000	.00051901	.00051901
500.	1222	11.	10.	21.	21.	10.	1.00000000	.00051901	.00051901
501.	1223	16.	13.	29.	29.	13.	1.00000000	.00071672	.00071672
502.	1231	12.	49.	61.	58.	46.	.95081767	.00150759	.00143344
503.	1232	25.	171.	196.	193.	171.	.98467388	.00484405	.00476991
504.	1233	21.	41.	62.	62.	41.	1.00000000	.00153230	.00153230
505.	1234	9.	50.	59.	59.	50.	1.00000000	.00145816	.00145816
506.	1235	12.	34.	46.	46.	34.	1.00000000	.00112487	.00112487
507.	1236	5.	8.	13.	13.	8.	1.00000000	.00032129	.00032129
508.	1237	14.	78.	92.	92.	78.	1.00000000	.00227374	.00227374
509.	1238	1.	4.	5.	5.	4.	1.00000000	.00012357	.00012357
510.	1239	5.	10.	15.	15.	10.	1.00000000	.00037072	.00037072
511.	1241	1.	6.	7.	7.	6.	1.00000000	.00017300	.00017300
512.	1242	2.	5.	7.	6.	4.	.85714286	.00017300	.00014609
513.	1243	2.	9.	11.	11.	9.	1.00000000	.00027186	.00027186
514.	1244	21.	93.	114.	114.	93.	1.00000000	.00281746	.00281746
515.	1245	39.	155.	194.	194.	155.	1.00000000	.00479462	.00479462
516.	1246	14.	0.	14.	12.	0.	.85714286	.00034600	.00029657
517.	1247	28.	69.	97.	30.	21.	.30927935	.00239731	.00074144
518.	1248	36.	250.	286.	89.	55.	.29720280	.00706836	.00210074
519.	1249	2.	2.	4.	4.	2.	1.00000000	.00009886	.00009886
520.	1250	91.	344.	435.	435.	344.	1.00000000	.01075083	.01075083

NO

CAPITAL GAIN  
AND LOSS PARAGRAPHS

TOTAL PARAGRAPHS

IRC  
SECTION

WEIGHTED  
AVERAGE

CAPITAL GAINS  
COMPLEXITY

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521.	1251	43.	245.	203.	43.	246.	1.00000000	.00607978	.00607978
522.	1252	8.	76.	70.	8.	76.	1.00000000	.00192773	.00192773
523.	1253	17.	84.	64.	17.	84.	.76428572	.00200188	.00200188
524.	1254	10.	10.	0.	10.	10.	1.00000000	.00024715	.00024715
525.	1255	9.	9.	0.	9.	9.	1.00000000	.00022243	.00022243
526.	1301	1.	3.	0.	0.	0.	.00000000	.00007414	.00000000
527.	1302	16.	31.	15.	0.	0.	.00000000	.00076615	.00000000
528.	1303	9.	22.	13.	0.	0.	.00000000	.00054372	.00000000
529.	1304	19.	69.	50.	0.	3.	.04347826	.00170530	.00007414
530.	1305	1.	1.	0.	0.	0.	.00000000	.00002471	.00000000
531.	1311	7.	30.	23.	1.	1.	.03333333	.00074144	.00002471
532.	1312	16.	61.	45.	0.	8.	.13114754	.00150759	.00019772
533.	1313	15.	41.	26.	0.	0.	.00000000	.00101330	.00000000
534.	1314	8.	37.	29.	1.	6.	.18912919	.00091444	.00017200
535.	1315	15.	59.	44.	3.	12.	.20336983	.00145816	.00029657
536.	1348	10.	106.	96.	0.	7.	.06603774	.00261974	.00017200
537.	1351	21.	21.	0.	4.	4.	.19047619	.00051901	.00009886
538.	1371	13.	43.	30.	0.	0.	.00000000	.00106273	.00000000
539.	1372	27.	107.	80.	1.	7.	.06542056	.00264446	.00017300
540.	1373	5.	29.	24.	2.	7.	.24137931	.00071672	.00017300
541.	1374	6.	25.	19.	1.	1.	.04000000	.00061766	.00002471
542.	1375	12.	116.	104.	3.	28.	.24137931	.00265669	.00069201
543.	1376	3.	13.	10.	1.	1.	.07622308	.00032129	.00002471
544.	1377	4.	13.	9.	0.	1.	.07622308	.00032129	.00002471
545.	1378	11.	40.	29.	11.	40.	1.00000000	.00098858	.00068658
546.	1379	9.	61.	55.	0.	0.	.00000000	.00158173	.00000000
547.	1381	7.	16.	9.	1.	2.	.12500000	.00039543	.00004943
548.	1382	22.	44.	22.	1.	1.	.02272727	.00108744	.00002471
549.	1383	7.	17.	10.	0.	0.	.00000000	.00042015	.00000000
550.	1385	14.	40.	26.	4.	19.	.47500000	.00098858	.00046958
551.	1388	37.	66.	29.	0.	0.	.00000000	.00163116	.00000000
552.	1391	14.	16.	0.	0.	0.	.00000000	.00035543	.00000000
553.	1392	7.	7.	0.	0.	0.	.00000000	.00017300	.00000000
554.	1393	7.	7.	0.	1.	1.	.14285714	.00017300	.00002471
555.	1394	7.	7.	0.	2.	2.	.28571429	.00017300	.00004743
556.	1395	1.	1.	0.	0.	0.	.00000000	.00002471	.00000000
557.	1396	2.	2.	0.	0.	0.	.00000000	.00000000	.00000000
558.	1397	4.	4.	0.	0.	0.	.00000000	.00009886	.00000000
559.	1401	16.	20.	4.	1.	1.	.05000000	.00049429	.00002471
560.	1402	62.	372.	310.	6.	8.	.02150538	.00919381	.00019772

CAPITAL GAIN  
AND LOSS PARAGRAPHS

SECTION	TOTAL PARAGRAPHS		TOTAL REGULATION		TOTAL	CODE	REGULATION	TOTAL	CAPITAL GAINS		TOTAL	WEIGHTED
	CODE	REGULATION	REGULATION	TOTAL					COMPLEXITY	COMPLEXITY		
561.	1403	4.	1.	0.	5.	0.	0.	0.	.00000000	.00000000	.00012357	.00000000
562.	1441	15.	71.	9.	86.	3.	9.	12.	.1353488	.00000000	.00212315	.00029657
563.	1442	3.	2.	0.	5.	1.	0.	1.	.20000000	.00000000	.00012357	.00002471
564.	1443	2.	15.	0.	17.	0.	0.	0.	.00000000	.00000000	.00042015	.00000000
565.	1451	12.	21.	0.	33.	0.	0.	0.	.00000000	.00000000	.00081558	.00000000
566.	1461	1.	60.	0.	61.	0.	0.	0.	.00000000	.00000000	.00150759	.00000000
567.	1462	1.	2.	0.	3.	0.	0.	0.	.00000000	.00000000	.00007414	.00000000
568.	1463	1.	1.	0.	2.	0.	0.	0.	.00000000	.00000000	.00004943	.00000000
569.	1464	1.	2.	0.	3.	0.	0.	0.	.00000000	.00000000	.00007414	.00000000
570.	1481	14.	0.	0.	14.	0.	0.	0.	.00000000	.00000000	.00034600	.00000000
571.	1482	6.	0.	0.	6.	0.	0.	0.	.00000000	.00000000	.00014829	.00000000
572.	1491	5.	1.	1.	6.	5.	1.	6.	1.00000000	.00000000	.00014829	.00014829
573.	1492	4.	4.	0.	8.	0.	1.	1.	.12500000	.00000000	.00019772	.00002471
574.	1494	2.	2.	0.	4.	0.	0.	0.	.00000000	.00000000	.00019772	.00000000
575.	1501	1.	1.	0.	2.	0.	0.	0.	.00000000	.00000000	.00004943	.00000000
576.	1502	1.	757.	85.	758.	0.	85.	85.	.11213720	.00000000	.01873363	.00210074
577.	1503	11.	2.	0.	13.	1.	0.	1.	.07692368	.00000000	.00032129	.00002471
578.	1504	17.	1.	0.	18.	0.	0.	0.	.00000000	.00000000	.00014829	.00000000
579.	1505	2.	0.	0.	2.	1.	0.	1.	.50000000	.00000000	.00004943	.00002471
580.	1511	8.	22.	0.	30.	0.	0.	0.	.00000000	.00000000	.00074144	.00000000
581.	1522	6.	31.	5.	37.	1.	5.	6.	.12214216	.00000000	.00091414	.00014829
582.	1531	8.	109.	0.	117.	1.	0.	1.	.00000000	.00000000	.00209160	.00002471
583.	1543	46.	120.	0.	166.	0.	0.	0.	.00000000	.00000000	.00459691	.00000000
584.	1564	14.	8.	0.	22.	0.	0.	0.	.00000000	.00000000	.00054372	.00000000
9040.		31422.	40462.	1415.	4763.	6178.			1.00000000			.15268647

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Table 5. CONTINUED  
 CHLORINE BALANCE FOR U.S. CONDUCTIONS

174	516	703	514	703	691	759
175	517	451	595	706	852	901
176	518	453	611	707	854	902
177	519	454	612	708	855	903
178	520	455	613	721	856	971
179	521	481	6150	722	857	991
180	522	482	614	723	858	973
181	523	483	615	731	859	995
182	524	501	617	732	860	996
183	525	502	651	733	861	997
184	526	503	656	734	862	1001
185	527	504	641	735	863	1011
186	528	507	642	736	864	1012
187	529	509	683	741	871	1014
188	530	511	644	743	872	1015
189	531	512	651	751	873	1016
190	532	513	682	752	874	1017
191	533	514	661	753	876	1019
192	534	515	682	755	877	1021
193	535	517	683	761	879	1023
194	536	518	661	691	881	1031
195	537	522	685	692	882	1033
196	538	523	688	694	894	1034
197	539	524	667	809	901	1035
198	540	527	663	810	902	1036
199	541	512	671	812	904	1037
200	542	513	672	815	907	1038
201	543	514	673	817	921	1039
202	544	515	674	818	922	1040
203	545	516	675	819	924	1041
204	546	517	676	819	924	1041
205	547	518	677	820	924	1043
206	548	519	678	821	926	1044
207	549	520	681	821	926	1044
208	550	521	682	822	926	1044
209	551	522	683	823	926	1044
210	552	523	684	824	926	1044
211	553	524	685	825	926	1044
212	554	525	686	826	926	1044
213	555	526	687	827	926	1044
214	556	527	688	828	926	1044
215	557	528	689	829	926	1044
216	558	529	690	830	926	1044
217	559	530	691	831	926	1044
218	560	531	692	832	926	1044
219	561	532	693	833	926	1044
220	562	533	694	834	926	1044
221	563	534	695	835	926	1044
222	564	535	696	836	926	1044
223	565	536	697	837	926	1044
224	566	537	698	838	926	1044
225	567	538	699	839	926	1044
226	568	539	700	840	926	1044
227	569	540	701	841	926	1044
228	570	541	702	842	926	1044
229	571	542	703	842	926	1044
230	572	543	704	842	926	1044
231	573	544	704	842	926	1044
232	574	545	704	842	926	1044
233	575	546	704	842	926	1044
234	576	547	704	842	926	1044
235	577	548	704	842	926	1044
236	578	549	704	842	926	1044
237	579	550	704	842	926	1044
238	580	551	704	842	926	1044
239	581	552	704	842	926	1044
240	582	553	704	842	926	1044
241	583	554	704	842	926	1044
242	584	555	704	842	926	1044
243	585	556	704	842	926	1044
244	586	557	704	842	926	1044
245	587	558	704	842	926	1044
246	588	559	704	842	926	1044
247	589	560	704	842	926	1044
248	590	561	704	842	926	1044
249	591	562	704	842	926	1044
250	592	563	704	842	926	1044
251	593	564	704	842	926	1044
252	594	565	704	842	926	1044
253	595	566	704	842	926	1044
254	596	567	704	842	926	1044
255	597	568	704	842	926	1044
256	598	569	704	842	926	1044
257	599	570	704	842	926	1044
258	600	571	704	842	926	1044
259	601	572	704	842	926	1044
260	602	573	704	842	926	1044
261	603	574	704	842	926	1044
262	604	575	704	842	926	1044
263	605	576	704	842	926	1044
264	606	577	704	842	926	1044
265	607	578	704	842	926	1044
266	608	579	704	842	926	1044
267	609	580	704	842	926	1044
268	610	581	704	842	926	1044
269	611	582	704	842	926	1044
270	612	583	704	842	926	1044
271	613	584	704	842	926	1044
272	614	585	704	842	926	1044



TABLE 2011.00.00.00.00 (Total, Main, Local, and  
 Non-Residential District)

1000	700	1000	100	1000	1000	1000	1000	1000	1000
1001	800	1001	100	1001	1001	1001	1001	1001	1001
1002	900	1002	100	1002	1002	1002	1002	1002	1002
1003	1000	1003	100	1003	1003	1003	1003	1003	1003
1004	1100	1004	100	1004	1004	1004	1004	1004	1004
1005	1200	1005	100	1005	1005	1005	1005	1005	1005
1006	1300	1006	100	1006	1006	1006	1006	1006	1006
1007	1400	1007	100	1007	1007	1007	1007	1007	1007
1008	1500	1008	100	1008	1008	1008	1008	1008	1008
1009	1600	1009	100	1009	1009	1009	1009	1009	1009
1010	1700	1010	100	1010	1010	1010	1010	1010	1010
1011	1800	1011	100	1011	1011	1011	1011	1011	1011
1012	1900	1012	100	1012	1012	1012	1012	1012	1012
1013	2000	1013	100	1013	1013	1013	1013	1013	1013
1014	2100	1014	100	1014	1014	1014	1014	1014	1014
1015	2200	1015	100	1015	1015	1015	1015	1015	1015
1016	2300	1016	100	1016	1016	1016	1016	1016	1016
1017	2400	1017	100	1017	1017	1017	1017	1017	1017
1018	2500	1018	100	1018	1018	1018	1018	1018	1018
1019	2600	1019	100	1019	1019	1019	1019	1019	1019
1020	2700	1020	100	1020	1020	1020	1020	1020	1020
1021	2800	1021	100	1021	1021	1021	1021	1021	1021
1022	2900	1022	100	1022	1022	1022	1022	1022	1022
1023	3000	1023	100	1023	1023	1023	1023	1023	1023
1024	3100	1024	100	1024	1024	1024	1024	1024	1024
1025	3200	1025	100	1025	1025	1025	1025	1025	1025
1026	3300	1026	100	1026	1026	1026	1026	1026	1026
1027	3400	1027	100	1027	1027	1027	1027	1027	1027
1028	3500	1028	100	1028	1028	1028	1028	1028	1028
1029	3600	1029	100	1029	1029	1029	1029	1029	1029
1030	3700	1030	100	1030	1030	1030	1030	1030	1030
1031	3800	1031	100	1031	1031	1031	1031	1031	1031
1032	3900	1032	100	1032	1032	1032	1032	1032	1032
1033	4000	1033	100	1033	1033	1033	1033	1033	1033
1034	4100	1034	100	1034	1034	1034	1034	1034	1034
1035	4200	1035	100	1035	1035	1035	1035	1035	1035
1036	4300	1036	100	1036	1036	1036	1036	1036	1036
1037	4400	1037	100	1037	1037	1037	1037	1037	1037
1038	4500	1038	100	1038	1038	1038	1038	1038	1038
1039	4600	1039	100	1039	1039	1039	1039	1039	1039
1040	4700	1040	100	1040	1040	1040	1040	1040	1040
1041	4800	1041	100	1041	1041	1041	1041	1041	1041
1042	4900	1042	100	1042	1042	1042	1042	1042	1042
1043	5000	1043	100	1043	1043	1043	1043	1043	1043
1044	5100	1044	100	1044	1044	1044	1044	1044	1044
1045	5200	1045	100	1045	1045	1045	1045	1045	1045
1046	5300	1046	100	1046	1046	1046	1046	1046	1046
1047	5400	1047	100	1047	1047	1047	1047	1047	1047
1048	5500	1048	100	1048	1048	1048	1048	1048	1048
1049	5600	1049	100	1049	1049	1049	1049	1049	1049
1050	5700	1050	100	1050	1050	1050	1050	1050	1050
1051	5800	1051	100	1051	1051	1051	1051	1051	1051
1052	5900	1052	100	1052	1052	1052	1052	1052	1052
1053	6000	1053	100	1053	1053	1053	1053	1053	1053
1054	6100	1054	100	1054	1054	1054	1054	1054	1054
1055	6200	1055	100	1055	1055	1055	1055	1055	1055
1056	6300	1056	100	1056	1056	1056	1056	1056	1056
1057	6400	1057	100	1057	1057	1057	1057	1057	1057
1058	6500	1058	100	1058	1058	1058	1058	1058	1058
1059	6600	1059	100	1059	1059	1059	1059	1059	1059
1060	6700	1060	100	1060	1060	1060	1060	1060	1060
1061	6800	1061	100	1061	1061	1061	1061	1061	1061
1062	6900	1062	100	1062	1062	1062	1062	1062	1062
1063	7000	1063	100	1063	1063	1063	1063	1063	1063
1064	7100	1064	100	1064	1064	1064	1064	1064	1064
1065	7200	1065	100	1065	1065	1065	1065	1065	1065
1066	7300	1066	100	1066	1066	1066	1066	1066	1066
1067	7400	1067	100	1067	1067	1067	1067	1067	1067
1068	7500	1068	100	1068	1068	1068	1068	1068	1068
1069	7600	1069	100	1069	1069	1069	1069	1069	1069
1070	7700	1070	100	1070	1070	1070	1070	1070	1070
1071	7800	1071	100	1071	1071	1071	1071	1071	1071
1072	7900	1072	100	1072	1072	1072	1072	1072	1072
1073	8000	1073	100	1073	1073	1073	1073	1073	1073
1074	8100	1074	100	1074	1074	1074	1074	1074	1074
1075	8200	1075	100	1075	1075	1075	1075	1075	1075
1076	8300	1076	100	1076	1076	1076	1076	1076	1076
1077	8400	1077	100	1077	1077	1077	1077	1077	1077
1078	8500	1078	100	1078	1078	1078	1078	1078	1078
1079	8600	1079	100	1079	1079	1079	1079	1079	1079
1080	8700	1080	100	1080	1080	1080	1080	1080	1080
1081	8800	1081	100	1081	1081	1081	1081	1081	1081
1082	8900	1082	100	1082	1082	1082	1082	1082	1082
1083	9000	1083	100	1083	1083	1083	1083	1083	1083
1084	9100	1084	100	1084	1084	1084	1084	1084	1084
1085	9200	1085	100	1085	1085	1085	1085	1085	1085
1086	9300	1086	100	1086	1086	1086	1086	1086	1086
1087	9400	1087	100	1087	1087	1087	1087	1087	1087
1088	9500	1088	100	1088	1088	1088	1088	1088	1088
1089	9600	1089	100	1089	1089	1089	1089	1089	1089
1090	9700	1090	100	1090	1090	1090	1090	1090	1090
1091	9800	1091	100	1091	1091	1091	1091	1091	1091
1092	9900	1092	100	1092	1092	1092	1092	1092	1092
1093	10000	1093	100	1093	1093	1093	1093	1093	1093
1094	10100	1094	100	1094	1094	1094	1094	1094	1094
1095	10200	1095	100	1095	1095	1095	1095	1095	1095
1096	10300	1096	100	1096	1096	1096	1096	1096	1096
1097	10400	1097	100	1097	1097	1097	1097	1097	1097
1098	10500	1098	100	1098	1098	1098	1098	1098	1098
1099	10600	1099	100	1099	1099	1099	1099	1099	1099
1100	10700	1100	100	1100	1100	1100	1100	1100	1100



TABLE 10  
SUBCHAPTER CLASSIFICATION OF SECTIONS THAT  
CONSIST OF MORE THAN 200 PARAGRAPHS

	<u>SUBCHAPTER - PART</u>		<u>TOPIC</u>	<u>NUMBER OF SECTIONS</u>
CH. 1	A	IV	Investment Tax Credits	3
	B	II	Annuities	1
		III	Tax Exempt Interest	1
		VI	Depreciation, Charitable Con- tribution, Net Operating Loss	3
		IX	Travel and Entertainment	1
	C	II	Collapsible Corporation	1
		III	Foreign Reorganization	1
		V	Carryovers in Corporate Acqui- sition	1
		VI	Debt/Equity	1
	D	I	Pension Plans	8
		II	Stock Options	1
	E	II	At Risk Rules	1
	F	I	Tax Exempt Organizations	1
		II	Private Foundations	2
		III	Unrelated Income	2
	G	II	Personal Holding Company	1
	H	II	Mutual Savings Bank - Reserves	1
	I	I	Depletion	3
	J	I	Estate and Trust - Special Rules	1
	M	II	REIT	1
	N	I	Foreign Source of Income	2
		III	Subpart F Income, FTC	5
		IV	DISC	2

TABLE 10

<u>SUBCHAPTER - PART</u>			<u>TOPIC</u>	<u>NUMBER OF SECTIONS</u>
CH. 1	P	IV	Recapture, Sale of Foreign Corporate Stock	3
CH. 2			Self-employment Tax	1
CH. 6	A		Consolidated Returns	<u>1</u>
				<u>49</u> Sections

## CHAPTER V

### TAX EXPENDITURE/COMPLEXITY MODEL DEVELOPMENT

Chapter III developed a complexity measurement model and Chapter IV derived a percentage of complexity attributable to the capital gain and loss preference. In this chapter, I will build on the prior findings to develop a tax expenditure/complexity measure (TEC). This index could be useful in determining the efficiency<sup>44</sup> of a specific provision. I define efficiency as how complex a preference makes the tax law compared with how much tax savings is produced. This might be useful to judge the best alternative tax rule to raise (lower) revenue at minimum cost (complexity). It can also be used to compare relative efficiency among various competing proposals or preferences.

The concept of tax expenditure owes its origin to Professor Stanley S. Surrey who, as Assistant Secretary of Tax Policy in late 1967, described tax expenditures as "those provisions of federal income tax containing special exemptions, exclusions, deductions, and other tax benefits [which] were really methods of providing governmental financing assistance".(30) However, since this assistance was off-budget, it was not reviewed on an annual or consistent basis. In 1971-1973 tax expenditure budgets were roughly \$60-65 billion or 25% of the regular budget. In fiscal 1980, the tax expenditure budget was \$81 billion, or 33% of the direct expenditure budget, and the Congressional Budget Office predicts that tax expenditures will increase to \$350 billion by fiscal 1985.<sup>45</sup>

The concept of "tax expenditures" was finally recognized as being so im-

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<sup>44</sup> For a discussion of the inefficiency involved in the tax preference concept, see Jacqueline Browning, "A Microeconomic Analysis of Tax Preference in the Federal Individual Income Tax", (Ph.D. Dissertation, University of Virginia, 1976).

<sup>45</sup> See Business Week, May 20, 1980.

portant that a mandatory listing of the tax expenditure is now required as a supplement to the budget process by the Congressional Impoundment Control Act of 1974.

Basically, Surrey and others break up the tax law into two parts:

1. Rules that are necessary to carry out the revenue-raising function of a tax on income, and
2. Exceptions and modifications of these rules that reduce some people's taxes and not others.

These divisions correspond to the discussion in Chapter I of unavoidable and avoidable tax rules. Obviously, this classification scheme has not been without its share of controversy.<sup>46</sup>

1 - The 'normal' tax structure: The tax expenditure concept assumes a basic theoretical income measurement model and equal treatment of all income. Variations in either amount or method gives rise to tax expenditures. The income concept discussed in Chapter I, with modifications, is ascribed to be the base. Some critics feel that a consumption-based income model should be used. Thus, some have argued that capital gains and losses are not a tax expenditure, since under a consumption-based definition of income, capital gains or losses would not be taxed at all.

2 - Can a normal tax structure be defined? Some critics argue that no normal tax structure can be defined, and is purely arbitrary. Any deviation from this arbitrary structure is not a tax expenditure, but a modification of an already arbitrary tax structure.

3 - Behavioral changes due to tax expenditure: Some economists feel that the numbers in the tax expenditures are inaccurate and overstated, since

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<sup>46</sup> See Tax Expenditure: A Primer, for a good general discussion of this area.



they do not take into account behavioral changes due to the preference.(31) Despite these criticisms, the tax expenditure concept has become an increasingly valuable tool in the discussion of income taxes and budgets.

The tax expenditure/complexity measure will be developed as follows. The tax expenditure budget is reviewed for the amount of tax savings attributable to a given preference. This amount will be divided by the complexity weight generated by the model developed in Chapters III and IV. The higher the index number, the more efficient the tax expenditure is.

From this, and future analyses, a matrix could be developed to measure which provisions are efficient, inefficient and need further study.

FIGURE 2  
TEC MATRIX

		Complexity (1 - 100%)	
		HIGH	LOW
\$ Billions - Tax Expenditure	HIGH	Further Study	Efficient
	LOW	Inefficient	Further Study

The capital gain and loss preference, and a rough estimate of the tax preference and complexity due to tax exempt interest income, will be presented to illustrate the concept, using the U.S. Congressional Budget Office June 1979 list of tax expenditures for the TEC ratio (see Table 11 for the full list of tax expenditures). Capital gains tax expenditures are composed of the following:

FIGURE 3  
CAPITAL GAINS TAX EXPENDITURE

	\$ Millions
Capital Gain - Coal	85
Capital Gain - Timber	455
Capital Gain - Iron	20
Capital Gain - Farm	395
Capital Gain - other than Mineral, Farm and Timber	10,775
	11,730 <sup>47</sup>

FIGURE 4  
TAX EXEMPT INTEREST INCOME TAX EXPENDITURE

	\$ Millions
State and Local Pollution Control Bonds Interest	460
State and Local Industrial Development Interest	585
State and Local Housing Bond Interest	820
State and Local Debt Interest	5,880
	7,745

The complexity attributable to capital gain and loss preference is 15%, while the tax exempt bond interest exemption is roughly 3%.<sup>48</sup>

The TEC ratio for capital gains would be  $\frac{11.73}{.15}$  or 78.2, while for tax exempt interest income it would be  $\frac{7.745}{.03}$  or 258.2. Thus, the tax exempt bond interest preference is more than three times as efficient as the capital asset preference. Within the same year, these numbers are comparable. However, in comparing different years, an adjustment for inflation would be required.

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<sup>47</sup> \$10,005B of capital gain preference, due to death, is omitted since under our existing system, death is not a recognizable event that triggers gain or loss. Therefore, the preference is a recognition of income tax expenditure and not a capital gain and loss tax expenditure. Similarly, \$1.010B tax expenditure for deferral on home sales and \$535M permanent exclusion of principal residence (Section 121) are not included, since it is a recognition preference.

<sup>48</sup> Sections 103, 265, and 75 are fully complicated by the tax exempt interest preference, and Sections 171, 312, 381, 1377, 1372, 643, 702, 809, 818, 822, 852, and 1232 are impacted in varying degrees.

ANNOTATED LIST OF TAX EXPENDITURES

This list includes all the tax expenditures listed in the most recent tax expenditures budgets published in the Special Analyses of the U.S. Budget and by the Congressional Budget Office. The list, like the tax expenditures budgets, is organized by the functional categories used in the direct expenditures budget. The authority for and descriptions of most entries were adapted from Tax Expenditures: Relationships to Spending Programs and Background Material on Individual Provisions (U.S. Senate Committee on the Budget, 1978). Descriptions of tax expenditures added or substantially modified since that publication are based on the committee reports on the Revenue Act of 1978, the Energy Tax Act of 1978, and the Foreign Earned Income Act of 1978. Cost estimates are taken from Five-Year Budget Projections and Alternative Budgetary Strategies for Fiscal Years 1980-1984, Supplemental Report on Tax Expenditures (U.S. Congressional Budget Office, June 1979).

Estimated  
cost Fiscal  
Year 1960  
(\$ millions)

<u>Tax expenditure</u>	<u>Authority</u>	<u>Description</u>
	-- NATIONAL DEFENSE --	
Exclusion of benefits and allowances to Armed Forces personnel	1,470 Internal Revenue Code (IRC) secs. 112, 113; Internal Revenue Regulation (IR Reg.) 1.61-2; court decisions	Military personnel are not taxed on quarters and meals provided, allowances given in lieu of quarters and meals, mustering-out payments, combat pay, and a few other such benefits.
Exclusion of military disability pensions	130 IRC secs. 104(a)(4), 104(b)	Military pensions based on disability are often not subject to income tax.
	-- INTERNATIONAL AFFAIRS --	
Exclusion of income earned abroad by U.S. citizens	555 IRC secs. 911-913	U.S. citizens and legal residents living and working in other countries may reduce their foreign earned income in one of several ways. Persons required to live in work camps under hardship conditions may exclude a portion of their income. Others (except U.S. Government employees) may deduct certain excess foreign living expenses, such as the cost of schooling for their children and housing costs in excess of U.S.

housing costs. U.S. Government employees may exclude certain housing and other allowances and benefits.

1,260 IRC secs. 991-997

Corporations established to export U.S.-made products may defer indefinitely the corporate tax on a part of their profits.

Deferral of tax on income of domestic international sales corporations (DISCs)

445 IRC secs. 11(d), 882, 951-964

The profits of foreign subsidiaries of U.S. corporations are generally not taxed by the U.S. until the money is returned to this country, permitting indefinite deferral of the U.S. tax.

Deferral of tax on income of controlled foreign corporations

5 IRC secs. 921, 922

Formerly, the law allowed profits earned in trade with Western Hemisphere countries to be taxed at a reduced rate. This provision is being phased out and will be eliminated by 1980.

Special tax rate for Western Hemisphere trade corporations

-----GENERAL SCIENCE, SPACE, AND TECHNOLOGY-----

1,780 IRC sec. 174

Research and development costs may be deducted as current expenses in the year incurred instead of being capitalized and charged against the income they produce as it is earned.

Expensing of research and development expenditures

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

Tax expenditure

Authority

Description

-----ENERGY-----

Expensing of  
exploration and  
development costs

1,665

IRC secs. 263(c),  
465, 616, 617,  
704(d), 1254

The costs of searching for oil, minerals, etc. and bringing them to the point of production (including "intangible drilling" costs) may, for tax purposes, be deducted currently from other income; in normal accounting practice, such expenses would be capitalized and charged against the income from the property as it is produced. Most of the revenue loss relates to oil and gas income.

Excess of percent-  
age over cost  
depletion

1,750

IRC secs. 613,  
613A

Taxpayers are allowed to deduct as depletion each year a fixed percentage of their income from many types of mineral property rather than their prorated investment in the well or mine; the latter is considered the "normal" deduction and the extra deduction that percentage depletion produces is considered a tax expenditure. The deduction for all minerals is included here because most of it relates to fuels.

Capital gains treatment of royalties on coal	85	IRC sec. 631(c)	Lessors of coal deposits can arrange the terms of the lease so that the royalties are taxed at the lower capital gains rates instead of as ordinary income.
Residential energy credits	435	IRC sec. 44C	Tax credits are allowed for home insulation and other energy-saving features and for installing solar and wind devices as alternative energy sources in private homes.
Alternative conservation and new technology credits	390	IRC secs. 46(a), 46(c)(6), 48(l)	Credits are also granted to businesses for various energy-saving features and alternative energy sources.
- - - - -NATURAL RESOURCES AND ENVIRONMENT- - - - -			
Exclusion of interest on State and local government pollution control bonds	460	IRC sec. 103(b)(4)(F)	State and municipal bond interest is generally not subject to Federal income tax unless the bonds are used to build facilities leased to private businesses ("industrial development bonds"). Some types of non-taxable industrial development bonds are allowed, however; the interest on bonds used to finance pollution control facilities leased to private concerns remains exempt from Federal income tax.

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

Tax expenditure

Authority

Description

-----NATURAL RESOURCES AND ENVIRONMENT (cont.)-----

Exclusion of payments in aid of construction of water and sewage facilities 60 IRC secs. 118(b), 362(c) Builders and developers often pay for the water and sewage facilities for their developments. The facilities then become the property of the local private utility serving the development. The contributions are not considered taxable income to the utility.

5-year amortization of pollution control facilities -10 IRC secs. 45(c), 169 Certified pollution control facilities may be written off over a 5-year period in lieu of being depreciated over their useful lives. This results in larger deductions early in the life of the property and no deductions later. The cost is negative in 1980 because the amortization of earlier years resulted in smaller depreciation deductions in 1980.

Capital gains treatment of certain timber income 455 IRC secs. 631(a), 631(c), 1221, 1231 In some circumstances profits from the sale of standing timber may be taxed at the lower capital gains rates instead of the ordinary rates.



Capital gains treatment of iron ore 20 IRC sec. 631(c)  
 Lessors of iron ore deposits can arrange the terms of the lease so that the royalties are treated as capital gains rather than ordinary income.

Tax incentives for preservation of historic structures 10 IRC secs. 167(n), 167(o), 191, 280B  
 The expenses of rehabilitating a certified historic structure may be either amortized over a 5-year period or treated as expenses subject to accelerated depreciation.

-----AGRICULTURE-----

Expensing of certain capital outlays 505 IRC secs. 162, 175, 180, 182, 278, 447, 464, 465, 704(d); IR Regs. 1.61-4, 1.162-12, 1.471-6  
 Unincorporated farmers may use the cash accounting method for all expenses, even those becoming a part of inventories or producing income in subsequent years, and are thus allowed to deduct currently expenses another type of business would have to capitalize. In addition, all farmers can take current deductions for such capital expenditures as soil and water conservation and land clearing expenses.

Capital gains treatment of certain ordinary income 395 IRC secs. 1201, 1202, 1221-1223, 1231, 1245, 1251, 1252  
 The gain from the sale of certain farm products, such as livestock and orchards, may be treated as a capital gain and taxed at lower rates than ordinary income.





Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

<u>Tax expenditure</u>	<u>Authority</u>	<u>Description</u>
		--COMMERCE AND HOUSING CREDITS (cont.)--
Deductibility of mortgage interest on owner-occupied homes	9,290 IRC sec. 163	Taxpayers who itemize deductions may deduct the interest they pay on their mortgages.
Deductibility of property taxes on owner-occupied homes	6,615 IRC sec. 164	Taxpayers who itemize deductions may deduct the property taxes on their homes.
Deductibility of interest on consumer credit	2,945 IRC sec. 163	Taxpayers who itemize deductions may also deduct the interest they pay on any other nonbusiness debt (auto loans, credit cards, etc.).
Expensing of construction period taxes and interest	700 IRC secs. 163, 164, 189	Interest and taxes paid while a building is under construction may be treated as current expenses (by corporations) or amortizable expenses (by individuals), rather than capitalized and depreciated like other construction costs.
Excess first-year depreciation	185 IRC sec. 179	Taxpayers may take a deduction for depreciation of up to 20 percent of \$10,000 worth of machinery

and equipment in the first year of use in addition to their regular depreciation for the year.

Residential rental property may be depreciated by accelerated methods for tax purposes, although straight-line depreciation is considered the normal method for buildings.

New nonresidential rental property may be depreciated by limited accelerated methods for tax purposes; straight-line depreciation is considered normal for buildings.

The Internal Revenue Service has established classes of assets with assigned useful lives to use in computing the depreciation deduction; the ADR system allows taxpayers to arbitrarily choose lives up to 20 percent shorter than the assigned lives, thus accelerating their depreciation deductions.

Gains on the sale of capital assets held for longer than a year may be taxed at lower rates than other income. Corporations may compute their tax on all capital gains at a rate of 28 percent if

350 IRC sec. 167(j)

350

Depreciation on rental housing in excess of straight line

255 IRC sec. 167(j)

255

Depreciation on buildings (other than rental housing) in excess of straight line

IRC sec. 167(m);  
IR Reg.  
1.167(a)-11;  
Rev. Proc. 72-10

3,030

Asset depreciation range

IRC secs.  
1201-1254

10,775

Capital gains (other than farming, timber, iron ore, and coal)



Investment credit 18,460  
(other than for  
TRASOPs and rehabil-  
itated structures)

IRC secs. 36,  
46-50

Businessmen may take up to 10 per-  
cent of the cost of machinery and  
equipment as a credit against  
their income tax. The extra  
credit for employee stock pur-  
chases (TRASOPs) and the limited  
credit for buildings are included  
elsewhere in this list.

Investment credit 180  
for rehabilitated  
structures

IRC sec. 48(g)

The Revenue Act of 1978 extended  
the 10 percent investment credit  
to rehabilitation expenditures  
for nonresidential commercial  
buildings at least 20 years old.

Exclusion of 320  
interest on  
State and local  
housing bonds

IRC sec.  
103(b)(4)(A)

One type of industrial develop-  
ment bond on which the interest  
is still nontaxable is that used  
to finance residential construc-  
tion; see the general discussion  
of industrial development bonds  
above.

-----TRANSPORTATION-----

5-year amortiza- -40  
tion on railroad  
rolling stock

IRC sec. 184

Before 1976, railway cars could  
be amortized over a 5-year period  
instead of being depreciated.  
Some of this equipment is still  
producing income; if it had been  
subject to normal depreciation  
its owners' taxes would have been  
higher in earlier years and would  
have been \$40 million lower in  
1980.





Exclusion of employee meals and lodging	350	IRC sec. 119	Meals and lodging furnished employees on the employer's premises for the convenience of the employer are not taxable income to the employee.
Exclusion of contributions to prepaid legal service plans	20	IRC sec. 120	Employers' contributions to prepaid legal service plans for their employees and the benefits their employees receive from the plans are not included in the employees' taxable income.
Investment credit for employee stock ownership plans (TRASOPs)	450	IRC secs. 46(a)(2), 48(n)	Corporations are allowed an additional 1 or 2 percent investment credit (in addition to the normal 10 percent) if they contribute an equivalent amount of their stock to a trust for their employees. This provision was added to the law by the Tax Reduction Act of 1975; "TRASOP" stands for Tax Reduction Act Stock Ownership Plan. The official acronym is now "ESOP"--Employee Stock Ownership Plan.
Deductibility of charitable contributions (education)	1,150	IRC sec. 170	Within certain limits, individuals who itemize deductions and corporations may deduct contributions to educational institutions and organizations.

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

<u>Tax expenditure</u>	<u>Authority</u>	<u>Description</u>
- - - - -	- - - - -	EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES (cont.)- - - - -
Deductibility of charitable contributions to other than education and health	6,405 IRC sec. 170	Within certain limits, individuals who itemize deductions and corporations may deduct contributions to charitable, religious, scientific, veteran, and amateur sports organizations and institutions; to societies for the prevention of cruelty to animals or children; to Federal, State, and local governments; and to fraternal organizations for charitable uses.
Maximum tax on personal service income	1,625 IRC sec. 1348	The maximum tax rate on "earned" income--wages and self-employment income--is 50 percent, although the statutory rate on investment and other "unearned" income can be as high as 70 percent.
Credit for child and dependent care expenses	705 IRC sec. 44A	A credit of up to \$400 for one dependent or \$800 for two or more dependents is allowed to individuals and couples who maintain households for dependent children or disabled dependents and must pay for their care in order to work.

Credit for employment of AFDC recipients and public assistance recipients under work incentive programs

160

IRC secs. 40, 50A,  
50B

Taxpayers who employ recipients of Aid to Families with Dependent Children or other public assistance may receive a credit for up to \$6,000 of wages paid to each such employee. For nonbusiness taxpayers the credit is 35 percent of the first year's wages; for business taxpayers it is 50 percent of the first year's wages and 25 percent of the second year's wages.

General jobs credit

215

IRC secs. 44B,  
51-53

For taxable years 1977 and 1978, employers could claim a credit for a part of their additional payroll if they had expanded their work force.

Targeted jobs credit

480

IRC secs. 44B,  
51-53, 6501(g)

Employers may take a credit for a percentage of the wages paid in the first 2 years of employment to employees from certain groups, such as public assistance recipients; disadvantaged youths, Vietnam era veterans, and convicts; vocational rehabilitation referrals; and cooperative education students.

Employer educational assistance

30

IRC sec. 127

Education provided or paid for by an employer for an employee is not included in the employee's taxable income; the tax expenditure arises from education that is not "job related."

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

<u>Tax expenditure</u>	<u>Authority</u>	<u>Description</u>
Exclusion of employer contributions for medical insurance premiums and medical care	IRC secs. 105, 106	Neither the contributions that employers make to accident and health plans for their employees nor the benefits the employees receive from such plans are taxable to the employees.
Deductibility of medical expenses	IRC sec. 213	Individuals who itemize deductions may deduct large medical bills (generally the excess over 3 percent of their adjusted gross income) and a portion of their medical insurance premiums.
Expensing of costs of removing architectural and transportation barriers to the handicapped	Less than IRC sec. 190 2.5	Taxpayers may treat expenses incurred in removing barriers to the handicapped as current deductions rather than capitalizing them.
Deductibility of charitable contributions (health)	IRC sec. 170	Within certain limits, individuals who itemize deductions and corporations may deduct contributions to charitable, educational, and scientific institutions and organizations concerned with health.

- - - - - INCOME SECURITY - - - - -

Exclusion of social security benefits:	Various IRS rulings	Social security benefits are not subject to Federal income tax.
Disability insurance benefits	735	
OASI benefits for retired workers	6,430	
Benefits for dependents and survivors	940	
Exclusion of railroad retirement benefits	305	45 U.S.C. 231m Under the Railroad Retirement Act of 1974, most benefits are nontaxable.
Exclusion of workmen's compensation benefits	1,285	IRC sec. 104(a)(1) Workmen's compensation benefits are nontaxable.
Exclusion of special benefits for disabled coal miners	50	IRC sec. 104(a)(1); Revenue Ruling 72-400 Payments for death or disability due to black lung disease are not taxable.
Exclusion of unemployment insurance benefits	1,935	IRC sec. 85 Unemployment compensation is generally not taxable unless adjusted gross income exceeds \$20,000 for a single individual or \$25,000 for a married couple filing jointly.

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

Description

Authority

Tax expenditure

-----INCOME SECURITY (cont.)-----

395 Exclusion of public assistance benefits      Various IRS rulings      Welfare payments are not taxable.

150 Exclusion of disability pay      IRC sec. 105(d)      Retired individuals under age 65 who are permanently and totally disabled may exclude up to \$5,200 a year of their disability pay. The exclusion is phased out for adjusted gross incomes of over \$15,000 a year.

12,925 Net exclusion of pension contributions and earnings: Employer plans      IRC secs. 401-407, 410-415      Employees are not taxed on the amounts their employers contribute to retirement plans or on the income the contributions earn until the employee withdraws the money.

2,205 Net exclusion of pension contributions: Plans for self-employed and others      IRC secs. 219, 220, 401-405, 408-415      Self-employed individuals and employees not covered by employer-paid pension plans may deduct limited amounts contributed to their own retirement plans. The income the contributions earn is not taxed until the money is withdrawn.

Exclusion of other employee benefits: Premiums on group term life insurance	915	IRC sec. 79	Employers may buy up to \$50,000 of group term life insurance coverage for an employee and the employee will not be taxed on the premiums.
Exclusion of other employee benefits: Premiums on accident and disability insurance	80	IRC sec. 106	Employer-paid premiums on accident and accidental death insurance policies for employees are not taxable income to the employees.
Exclusion of other employee benefits: Income of trusts to finance supplemental unemployment benefits	10	IRC sec. 501(c)(17)	The earnings of trusts established to finance supplemental unemployment benefits are not taxed to the employees until they receive payments from the trust.
Exclusion of interest on life insurance savings	2,720	IRC sec. 101(a), IR Reg. 1.451-2	Most life insurance policies, except term insurance, earn investment income for the policyholder, because the premiums are invested and a part of the earnings are used to pay for the cost of insurance or to increase the policy benefits. If the policyholder dies, none of the earnings are subject to income tax; if the policyholder cashes in the policy while living, the part of the earnings used to pay for insurance is never taxed and the tax on the remainder is deferred from the year the income was earned to the year the policy is redeemed.

Estimated  
cost Fiscal  
Year 1980  
(\$ millions)

Description

Authority

<u>Tax expenditure</u>		<u>Authority</u>	<u>Description</u>
			- - - - - INCOME SECURITY (cont.) - - - - -
Exclusion of capital gains on home sales for persons aged 55 and over	535	IRC sec. 121	Taxpayers aged 55 and over are allowed to exclude from taxable income up to \$100,000 of the gain on one sale of a principal residence.
Additional exemption for the elderly	1,855	IRC sec. 151(c)	An additional personal exemption of \$1,000 is allowed for a taxpayer who is aged 65 or over.
Additional exemption for the blind	35	IRC sec. 151(d)	An additional personal exemption of \$1,000 is allowed for a taxpayer who is legally blind.
Deductibility of casualty losses	475	IRC sec. 165(c)(3)	Individuals who itemize deductions may deduct the excess over \$100 of each nonbusiness loss due to fire, storm, shipwreck, other casualty, or theft.
Tax credit for the elderly	160	IRC sec. 37	Individuals who are aged 65 or older are allowed a small tax credit, reduced if they have tax-exempt retirement income or if their adjusted gross income exceeds \$7,500 a year (\$10,000 for a joint return). A credit is



also allowed to persons receiving payments from a public retirement system who are under age 65.

Wage-earners and self-employed taxpayers who maintain households for dependent children receive a tax credit equal to 10 percent of up to \$5,000 of earned income, reduced as income increases until it is phased out at \$10,000. The credit is "refundable," meaning that if the credit is greater than the taxpayer's liability for the year, the difference is paid directly. This item includes only the portion that reduces taxes; the "refundable" portion is a direct outlay (\$1,874 million in 1980).

IRC sec. 43

350

Earned income credit:  
Nonrefundable portion

- - - - - VETERANS' BENEFITS AND SERVICES - - - - -

Exclusion of veterans' disability compensation

1,005

38 U.S.C. 3101

All benefits paid by the Veterans Administration are tax-exempt.

Exclusion of veterans' pensions

55

Exclusion of GI bill benefits

170



- - - - - INTEREST - - - - -

Deferral of  
interest on  
savings bonds

625

IRC sec. 454

Interest on U.S. savings bonds  
is not taxable until the bonds  
are cashed in.

## Chapter V Citations

- (30) Surrey, Pathways to Tax Reform, preface vii.
- (31) Boskin, Federal Tax Reform: Myths and Realities, p. 237.

## CHAPTER VI

### POTENTIAL FUTURE RESEARCH AND CONCLUSIONS

This study applied a research methodology used in the communications literature (content analysis) to the field of taxation. In doing this study, two broad potential areas of future research have emerged. One would apply the concepts of this study to other areas (other preferences or other types of tax systems). The other would be to expand or apply the capital gain or loss preference findings to related disciplines or increase the scope of the complexity model's development (reduce its limitations).

The first branch of potential research might encompass the following areas. A worthwhile study might be to investigate the effect of complexity on the underground economy.<sup>49</sup> The underground economy is becoming a large problem for our society with estimates of its magnitude ranging from \$100 billion to \$700 billion of income. To put these numbers in perspective, the total federal budget is about \$700 billion for 1981. The U.S. income tax system is basically a voluntary assessment one. The foregone tax revenue from the subterranean economy is substantial.<sup>50</sup> If the Internal Revenue Service's administrative, comp-

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<sup>49</sup> See Walter Blum, "How the Favored Tax Treatment Affects Taxpayers and Practitioners", for an early (1956) discussion of potential effect of complexity on the underground economy mentality; Secretary of Treasury, Proposal for Tax Change, 4/30/73, p. 19; and M. Ginsburg, Tax Simplification: A Practitioner's View, where he discusses complexity and breakdown in the self-assessment system.

<sup>50</sup> See New York Times, May 12, 1981, in which the IRS estimates that tax cheating is on the rise. In 1976, \$28B of taxes were not paid by individuals and in 1978, \$2.3B of taxes were not paid by corporations. See also Chapter 12 of Hellerstein, Taxes, Loopholes and Morality, for a discussion of complexity and moral breakdown. The editorial page of the New York Times (4/15/81) discusses the problem of comprehension and complexity of the income tax system on the average citizen. They argue that "complexity corrupts", and "that mystery is the ultimate enemy of democracy". To paraphrase an old saying, if complexity corrupts, absolute complexity corrupts absolutely. With our tax law continually becoming more complex, the need for simplification may be more important than ever.

liance and collections resources could be redirected from issues such as capital gain and loss preferences and toward the underground economy, the whole system could benefit.

In 1973, a study on public attitudes on fairness of the income tax was conducted.<sup>(32)</sup> 52% of the respondents believed the income tax was the fairest way to raise federal revenue. A more recent questionnaire might be developed to gauge today's public reactions. The survey should also discover what aspects are perceived to be unfair. My own priors are that capital gains, tax shelters, and other preferences that complicate the law are perceived as unfair and encourage the breakdown of our voluntary tax compliance system. It is not unusual for people to say that the rich have their tax shelters and loopholes, so what is wrong with my non-reporting of income.

Completing the TEC matrix (Figure 2, p.77) by analyzing other income tax preference's complexity would put the various preferences efficiency in perspective. The same analysis applied in this study could be extended to the estate and gift, or state and local, tax areas, for example.

The impact of communications analysis to taxation could be explored in various ways. The area of estates, gifts, state and local taxes, as well as foreign taxes could be analyzed using content analysis. Several readability or comprehension tests exist<sup>51</sup> that could be applied to the tax area. It could measure the required reading level to understand the law. A study of the best presentation format for comprehension purposes could be performed,<sup>52</sup> or the ef-

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<sup>51</sup> Flesch Test and Dale-Chall Test, see footnote

<sup>52</sup> See P.C. Wason, "The Drafting of Rules", The New Law Journal, 118 (June 6, 1968): 548; and Patricia Wright, "Alternatives to Prose". Basically, four format possibilities were presented: simple prose, bureaucratic writing, tables, and flow charts.

fect of "noise" in the communications system could be analyzed.<sup>53</sup>

The dramatically increasing financial resources available to pension plans and other similar organizations has been noted in recent years. An analysis of its effect on the existing tax incentives to invest and on capital formation is an area deserving of future research.

The second broad area of research involves reducing the limitations of the study and increasing its scope. In analyzing Appendix C, below, it was found that certain areas of the tax law were complex, but their paragraph count was relatively low. A prime example of this is the reorganization (Section 368) which was cited by seven, out of nine, participants as complex, but was ranked 176 in terms of paragraph complexity. This area's regulations were adopted in 1954, and much of the complexity is embodied in the court cases and their interpretation of 'business purpose', 'continuity of interest', etc. Refinement of the present model could be designed to improve it.

The quantification of the costs and benefits of a tax preference such as capital gains and losses would be a worthwhile project including the measurement of behavioral changes due to the preference. There have been several studies on investment tax credit and its effect on investment and similar research could be tried in the capital gain and loss area.

The elimination of the capital gain and loss preference's effect on the marginal and effective tax structure would be a useful analysis. One recent study showed that the elimination of the capital gain and loss preference, and some other changes in the law could result in a maximum marginal tax rate of

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<sup>53</sup> See Claude Shannon and Warren Weaver, The Mathematical Theory of Communications, (Urbana: University of Illinois Press, 1949). If complexity affects comprehensibility, then the meaning of the message received by the taxpayer could be very different than the transmitter's (Congress).

30%.<sup>54</sup> This new tax system could be analyzed from the Adam Smith criterion model point of view. Many economists have argued that because of preferences, such as capital gains, real tax reform is unavailable. Basically, this is due to the small tax base. Given the government needs, all we are doing in tax reform is changing the mix of the pie. By eliminating preferences, we are expanding the pie which will allow more flexibility for real tax reform. The potential reduction in marginal tax rates could also have a salutary effect on many currently unproductive tax activities (i.e. uneconomic tax shelters).

It should be noted that as of the completion of this study, a new income tax law is being enacted. Its direct effect on the capital gain or loss area is minimal,<sup>55</sup> but its impact on the total tax system is significant. The analysis of this study could be applied to the new law.

#### Conclusion

The capital gain or loss preference is not justified under any of the updated Adam Smith criteria for a good income tax. Not only does the preference violate all the criteria, but the complexity in the U.S. income tax law attributable to the capital gain and loss preference exceeds 15% and affects 65% of all income tax sections. The consequences of this complexity is, at present, an unresearched area. This study uses the complexity attribute to develop a tax expenditure model (TEC) which will measure the relative efficiency of various preferences in the tax law.

This study demonstrates that the capital gain and loss preference creates a disproportionately large amount of complexity in the income tax law, is not justified under a Smithian criterion model, and is relatively inefficient.

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<sup>54</sup> Wall Street Journal, 5/19/81, Ed Moscovitch of Data Research Institute. See also Blueprints for Tax Reform in which a discussion of potential reduction in tax rates is also presented.

<sup>55</sup> It might reduce the holding period from twelve months to six and, because the highest marginal tax rate is reduced from 70% to 50%, the highest tax on C/G will be 20% (50% x 40%).



Chapter VI - Citation

(32) Richard Goode, Individual Income Tax, p. 5.

## APPENDIX A

### Lines vs. Paragraphs as Context Units: A Comparison

As previously discussed, the context unit of a line or a paragraph has been used in many content analysis studies. In order to add reliability to the study, it is appropriate to test whether there is any significant difference between lines or paragraphs as context units, assuming the recording unit (the capital gain and loss theme) is held constant.

I used a statistical sample of thirty-five code sections and their underlying regulations using both lines and paragraphs as the estimator. I numbered all code sections from 1 to 580. (This experiment was done prior to the complete study, so some of the numbers may be slightly different.) A random generating number table was used to choose the thirty-five code section sample. Any generating number above 580 was disregarded and the next number in rotation was used. The attached table shows the thirty-five code sections randomly chosen, their count of both lines and paragraphs, the line or paragraph complexity due to capital gain and loss provisions, the weight of each section, and statistics necessary to complete the experiment.

My hypothesis ( $H_0$ ) is that the two proportions from the same population are equal, and the alternative hypothesis ( $H_a$ ) is that the two proportions from the population are not equal. A priori, I had no particular reason to assume that line proportion would be larger or smaller than paragraph proportion, so I used a two-tail test. I used a test for significant differences. If I reject  $H_0$ , the null hypothesis, then I have an 88% chance of doing so falsely. This is because the Z statistic is .152376 which means that the reject region is very large (.44 on each side). The test supports the conclusion that the lines or paragraphs analyzed will give equivalent results. I decided for reasons given in Chapter III to utilize a paragraph approach.

SAMPLE VARIANCE AND TESTING FOR SIGNIFICANT DIFFERENCES

	<u>Paragraphs</u>	<u>Lines</u>
$\bar{x}$ mean	.0022776	.002005
$S^2_x$	.0000521	.0000587
$S_x$	.0072	.0077
N	35	35

STANDARD ERROR OF SAMPLE DISTRIBUTION

$$S\bar{x}_1 - \bar{x}_2 = \sqrt{\frac{(Sx_1)^2}{N_1} + \frac{(Sx_2)^2}{N_2}}$$

$$= \sqrt{\frac{.0000521}{35} + \frac{.0000587}{35}}$$

$$= \sqrt{.0000015 + .0000017}$$

$$Sx_1 - x_2 = .001789$$

$$z = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu x_1 - \mu x_2)}{\delta\bar{x}_1 - \bar{x}_2}$$

$$z = \frac{.0002726}{.001789} = .152376$$

PARAGRAPHS  
RANDOM GENERATED CODE SECTIONS  
STATISTICAL SAMPLE ON TESTING FOR  
SIGNIFICANT DIFFERENCE BETWEEN  
PARAGRAPHS AND LINES

(1) Section	(2) Relative Section WGT.	(3) % Of Section Attrib. To C/G/L	(4) (2) x (3)	(5) $ x_1 - \bar{x} $	(6) (S) <sup>2</sup>
31	.46707 %	-	-	.0022776	.000005
41	1.8683 %	-	-	.0022776	.000005
43	2.008 %	-	-	.0022776	.000005
77	.327 %	-	-	.0022776	.000005
113	.0934 %	-	-	.0022776	.000005
116	1.074 %	4.34783 %	.00047	.00181	.000003
162	7.613 %	5.5215 %	.00420	.00192	.000004
179	2.429 %	-	-	.0022776	.000005
219	3.1761 %	-	-	.0022776	.000005
338	.0467 %	-	-	.0022776	.000005
422	3.97 %	10.588 %	.00420	.00192	.000004
481	4.858 %	.96154 %	.00047	.00181	.000003
528	2.896 %	1.613 %	.000467	.00181	.000003
558	.0467 %	-	-	.0022776	.000005
563	.3737 %	-	-	.0022776	.000005
636	2.1485 %	8.6957 %	.0019	.00038	.00000014
673	.8407 %	5.556 %	.0005	.00178	.0000032
709	.654 %	-	-	.0022776	.000005
754	.234 %	-	-	.0022776	.000005
841	.1868 %	-	-	.0022776	.000005
951	2.4755 %	1.8868 %	.00047	.001808	.0000033
953	6.399 %	3.65 %	.00234	.00006	-
970	3.783 %	-	-	.0022776	.000005
971	3.363 %	-	-	.0022776	.000005
1012	2.943 %	36.508 %	.0107	.00842	.000071
1054	.14 %	-	-	.0022776	.000005
1247	4.531 %	30.928 %	.014	.0117224	.000137
1302	1.448 %	-	-	.0022776	.000005
1371	2.01153 %	-	-	.0022776	.000005
1443	.794 %	-	-	.0022776	.000005
1481	.654 %	-	-	.0022776	.000005
1482	.28 %	-	-	.0022776	.000005
1494	.374 %	-	-	.0022776	.000005
1501	.093 %	-	-	.0022776	.000005
1502	<u>35.4 %</u>	<u>11.214 %</u>	<u>.04</u>	<u>.03772</u>	<u>.001423</u>
	100.00 %	121.47 %	.079717		.0017696

$$\text{MEAN } \bar{x} = \frac{.079717}{35} = .0022776$$

$$Sx^2 = \frac{\sum [x - \bar{x}]^2}{N-1} = \frac{.0017696}{34} = .000521$$

$$Sx = .0072$$

PARAGRAPHS - RAW DATA

(1) Section	(2) Code + Reg. Paragraphs	(3) C/G/L Code + Reg. Paragraphs	(4) Percentages (3) ÷ (2)
31	10	-	-
41	40	-	-
43	43	-	-
77	7	-	-
113	2	-	-
116	23	1	4.34783
162	163	9	5.5215
179	52	-	-
219	68	-	-
338	1	-	-
422	85	9	10.588
481	104	1	.96154
528	62	1	1.613
558	1	0	-
563	8	0	-
636	46	4	8.6957
673	18	1	5.556
709	14	0	-
754	5	0	-
841	4	0	-
951	53	1	1.8868
953	137	5	3.65
970	81	0	-
971	72	0	-
1012	63	23	36.508
1054	3	0	-
1247	97	30	30.928
1302	31	0	-
1371	43	0	-
1443	17	0	-
1481	14	0	-
1482	6	0	-
1494	8	0	-
1501	2	0	-
1502	<u>758</u>	<u>85</u>	<u>11.214</u>
	2141	170	121.47 %

WGT AVERAGE:  $\frac{170}{2141} = 7.94025\%$

SIMPLE AVERAGE:  $\frac{121.47}{35} = 3.47\%$

LINES  
RANDOM GENERATED CODE SECTIONS  
STATISTICAL SAMPLE ON TESTING FOR  
SIGNIFICANT DIFFERENCE BETWEEN  
PARAGRAPHS AND LINES

(1) Section	(2) Relative Section WGT.	(3) % Of Section Attrib. To C/G/L	(4) (2) x (3)	(5) $ x_i - \bar{x} $	(6) (S) <sup>2</sup>
31	.4995 %	-	-	.002005	.000004
41	.898 %	-	-	.002005	.000004
43	1.25 %	-	-	.002005	.000004
77	.253 %	-	-	.002005	.000004
113	.037 %	-	-	.002005	.000004
116	.665 %	2.538 %	.00017	.00184	.0000034
162	9.62 %	5.441 %	.005	.003	.000009
179	2.994 %	-	-	.002005	.000004
219	1.46 %	-	-	.002005	.000004
338	.0068 %	-	-	.002005	.000004
422	5.37 %	13.27 %	.007	.005	.000025
481	5.81 %	.581 %	.0003	.00171	.000003
528	1.58 %	2.14 %	.0003	.00171	.000003
558	.0068 %	-	-	.002005	.000004
563	.213 %	-	-	.002005	.000004
636	2.87 %	3.41 %	.001	.001	.000001
673	.797 %	.848 %	.0001	.002	.000004
709	.361 %	-	-	.002005	.000004
754	.432 %	-	-	.002005	.000004
841	.047 %	-	-	.002005	.000004
951	3.32 %	1.3 %	.0004	.00161	.000003
953	9.85 %	1.7 %	.002	.000005	-
970	4.75 %	-	-	.002005	.000004
971	3.27 %	-	-	.002005	.000004
1012	3.396 %	43.84 %	.0149	.0129	.00017
1054	.135 %	-	-	.002005	.000004
1247	3.99 %	30.3 %	.012	.01	.0001
1302	.73 %	-	-	.002005	.000004
1371	2.2549 %	-	-	.002005	.000004
1443	.884 %	-	-	.002005	.000004
1481	.334 %	-	-	.002005	.000004
1482	.064 %	-	-	.002005	.000004
1494	.358 %	-	-	.002005	.000004
1501	.064 %	-	-	.002005	.000004
1502	<u>31.43 %</u>	<u>8.51 %</u>	<u>.027</u>	<u>.025</u>	<u>.00063</u>
	100.00 %	113.878 %	.07017		.0019948

$$\text{MEAN } \bar{x} = \frac{.07017}{35} = .002005$$

$$S_x^2 = \frac{\sum [x - \bar{x}]^2}{N-1} = .00005867$$

$$S_x = .0077$$

LINES - RAW DATA

(1) Section	(2) Code + Reg. Lines	(3) C/G/L Code + Reg. Lines	(4) Percentages (3) ÷ (2)
31	148	-	-
41	266	-	-
43	371	-	-
77	75	-	-
113	11	-	-
116	197	5	2.538
162	2849	155	5.441
179	887	-	-
219	432	-	-
338	2	-	-
422	1590	211	13.27
481	1722	10	.5807
528	468	10	2.1368
558	2	0	-
563	63	0	-
636	851	29	3.408
673	236	2	.8475
709	107	-	-
754	128	-	-
841	14	-	-
951	983	13	1.3225
953	2918	50	1.714
970	1408	-	-
971	970	-	-
1012	1006	441	43.837
1054	40	0	-
1247	1181	358	30.313
1302	217	-	-
1371	668	-	-
1443	262	-	-
1481	99	-	-
1482	19	-	-
1494	106	-	-
1501	19	-	-
1502	<u>9312</u>	<u>792</u>	<u>8.51</u>
	29627	2076	113.9185 %

WGT AVERAGE:  $\frac{2076}{29627} = 7.007122 \%$

SIMPLE AVERAGE:  $\frac{113.9185}{35} = 3.255 \%$

## APPENDIX B

### COMPARISON OF THE PRESENT STUDY AND SCHROEDER'S STUDY

As discussed in Chapter III, the present study differs in various ways from Jack Schroeder's "Potential Simplification of the Federal Income Tax Law by Eliminating Special Treatment of Capital Gains and Losses". In order to improve the validity of the present measurement model and to highlight differences between our two studies, an analysis of all code section classification variations was performed. There were 480 common code sections in our two studies (between 1973 and 1979 many law changes were introduced, and he only included Chapter 1 of the Internal Revenue Code). The classification of the capital gain or loss impact on an individual code section was rated none, some, or all in his study, while mine assigns a quantitative theme per paragraph rating. We differed on 40% of the common sections. Of the 191 different sections, 119 were sections that the present analysis showed five paragraphs or less being impacted by the capital gain or loss preference while his classification showed none. Using a de minimis rule and because of the different measurement models (his had only three discrete classifications, while mine is a more continuous function), I decided not to investigate these variations. The remaining 72 common code sections' variations (15% of total common sections) were analyzed as to differences. The following table lists the 72 code sections. The 72 sections were deemed correctly classified in the current study.



APPENDIX B - TABLE 12  
RECONCILIATION OF VARIANCES

<u>Code Section #</u>	<u>Schroeder Classification</u>	<u>Present Classification in Paragraphs</u>	<u>Disposition</u>
5	some	none	change in law removed alternative tax on C/G - no change required
56	none	8	tax preference includes capital gain and timber - no change to mine required
63	some	none	defines taxable income - no change to mine
173, 177, 178, 179	some	none	expense vs. capitalize, a timing problem - no change to mine
183	none	10	see section 1.183 - 1 (b) (4), for example - no change to mine
219	some	none	no justification for his, no lump-sum distribution rules apply - no change to mine
241, 244	some	none	no justification - no change to mine
248	some	none	timing difference - no change to mine
261	some	none	if any part of a subpart is affected by the preference, he taints the whole subpart - no change to mine
278	some	none	timing difference - no change to mine
305	none	122	major conceptual error by Schroeder, section attempts to prevent conversion of dividend income into capital gain, regulations discuss this - no change to mine

TABLE 12

<u>Code Section #</u>	<u>Schroeder Classification</u>	<u>Present Classification in Paragraphs</u>	<u>Disposition</u>
336	none	2	serious error by Schroeder, he ignores depreciation recapture implicit in section - no change to mine
338	some	none	no change to mine
346	none	22	serious error by Schroeder, if partial liquidation status present, you avoid much of 301/302 dichotomy - no change to mine
355	none	36	major error by Schroeder, O.I./C.G. is crucial to this area - no change
362	some	none	no change
367	none	215	major error by Schroeder, prevents avoidance of tax in foreign reorganization area - no change
368	none	6	1978 change in law with investment companies - no change
372	some	none	no change
385	none	10	serious error, bond vs. stock classification and C/G/L effect - no change
421	none	16	qualified stock option, C.G. vs. O.I. - no change
482	none	15	regulations discuss shifting of C/G/L among related parties - no change
531, 541	some	none	Schroeder counts introductions to an area, I don't - no change
534, 536, 544, 546, 547, 554, 557, 558, 561, 563, 564	some	none	Schroeder counts the whole area as being tainted, if any part is affected by preference - no change
612, 614, 671	none	8, 13, 8	regulations discuss C/G/L area - no change
681	none	8	unrelated business income involves C/G/L - no change

TABLE 12

<u>Code Section #</u>	<u>Schroeder Classification</u>	<u>Present Classification in Paragraphs</u>	<u>Disposition</u>
732, 736	none	17, 14	unrealized receivable allocation - no change
754	some	none	Schroeder looks at whole area, I look at each section - no change
844	some	none	no change
851	none	11	C/G/L preference important impact - no change
855	none	6	regulations discuss C/G dividend - no change
856	none	21	REIT involves C/G/L concept - no change
858	none	6	no change
861, 862, 864	none	18, 8, 57	code and regulations discuss classification and allocation - no change
882	none	7	alternative C/G tax applies - no change
904	none	23	change in law - no change
954, 955	none	18, 10	regulations discuss C/G/L - no change
1001, 1014	none	10, 10	regulations discuss C/G/L - no change
1031	none	12	gain on exchange (boot) and character - no change
1034	none	9	no change
1035, 1036	none	3, 4	character of boot gain - no change
1038	none	31	reacquisition, character - no change
1101	none	20	see 1101(c) - no change
1301, 1302	some	none	change in law (income average and alternative tax) - no change
1312	none	8	regulations discuss C/G - no change
1348	none	7	C/G preference effects P.S.T.I. - no change
1372, 1373	none	7, 7	C/G as passive income & distributable income - no change

APPENDIX C

TOP TEN COMPLEX CODE SECTION SURVEY

To test the internal validity of my findings, a panel of nine individuals with extensive tax backgrounds and varied tax experiences (educational, public and private practice, corporate, and government) were informally polled. They were asked to list the ten income tax code sections (or areas) in Chapters 1-6, Sections 1-1564 of the Internal Revenue Code that they considered the most complex. The attached tabulation gives the results of this polling (see Table 13).

Several strengths of my measurement model are reinforced by this panel's findings. Eighty-nine selections were named by the nine participants. Due to a consensus among the independent participants, forty-four areas were depicted as complex. This would seem to imply that there is some basic agreement among experts as to what areas of the tax law are complex. The areas selected by the tax experts represented 40% of the tax law's complexity using my measurement model. Thus, less than 5% of the code sections (areas), gives rise to 40% of its complexity. This strengthens my basic assumption (vis a vis Schroeder's) that each code section is not equally complex.

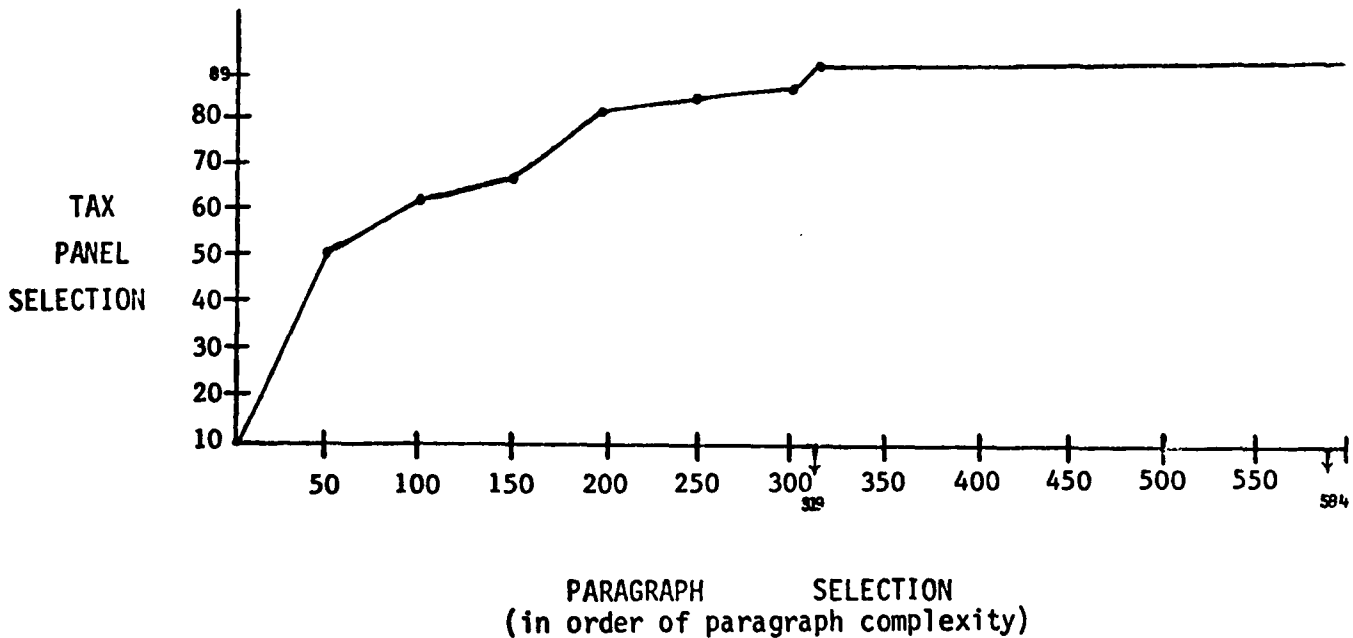
Comparing the top ten on a paragraph basis, with the panel's conclusions, the following is apparent:

FIGURE 5  
COMPARISON OF PANEL'S AND PARAGRAPHS'S TOP TEN

Top 10 Paragraph Code Sections	No. of Times Mentioned in Panel's Top 10 Survey
401	3
167	1
1502	4
170	2
46	1
103	0
48	1
381	4
72	0
1250	2
	18

Thus, 8 out of the top 10 paragraph complexity sections developed under my measurement model were selected by the experts as highly complex and these sections represented 20% (18 out of 89) of the panel's selections. Given the choice of 10 out of 584 code sections, there is obviously more than a random selection process at work. If the paragraph measurement is expanded to the top 50 code sections, then 22 out of 44 sections chosen by the tax panel are included, which represents 57% (51 selections out of 89) of the total selections. If this analysis were extended, then the following graph would depict the relationship between the tax panel's and the measurement model's findings:

FIGURE 6



This graph clearly shows that the panel's selections are substantially covered (93%) by the top 200 code sections (by paragraphs). This would confirm my hypothesis that paragraphs are a good measure of complexity and rebut the potential argument that more paragraphs means clearer explanations and less complexity.

Another interesting finding that can be derived from the tax panel study is that of the 44 code section areas chosen, only four (9%) were not affected by the capital gain or loss preference. This is to be contrasted with the more general conclusion of Chapter IV, that 35% of all code sections are not affected in some way by the C/G/L preference. This would imply that the C/G/L preference has a higher than normal impact on the tax panel's selection and that the C/G/L preference is a major cause of the complexity of the chosen sections.

APPENDIX C - TABLE 13  
 INFORMAL POLLING - TOP 10 COMPLEX CODE SECTIONS (AREAS)

<u>CODE SECTION OR AREA</u>	<u>NUMBER OF TIMES CITED BY PANEL</u>	<u>NUMBER OF PARAGRAPHS</u>	<u>COMPLEXITY RANKING</u>	<u>COMPLEXITY WGT UNDER MEASUREMENT MODEL</u>	<u>C/G/L COMPLEXITY ATTRIBUTABLE TO THESE SECTIONS</u>
46 - 48	1	1428	5	3.5 %	Yes
167	1	811	2	2.0 %	Yes
170	2	655	4	1.6 %	Yes
172	1	299	20	.74%	Yes
269	1	29	311	.07%	Yes
305	1	137	79	.34%	Yes
312	1	111	101	.27%	Yes
334	1	61	187	.15%	Yes
341	6	251	29	.62%	Yes
367	1	281	23	.69%	Yes
368	7	64	176	.16%	Yes
381 - 383	4	753	8	1.86%	Yes
385	2	240	35	.59%	Yes
401 - 404	3	1622	1	4.0 %	Yes
411 - 412	1	637	14	1.57%	No
465	1	260	27	.64%	Yes
471 - 472	3	276	77	.68%	No
481	2	104	110	.26%	Yes
482	3	176	62	.44%	Yes
501 - 504	3	455	19	1.12%	Yes
507	1	230	39	.57%	Yes
613 - 613A	1	483	26	1.19%	Yes
661 - 664	1	309	61	.76%	Yes
667	1	39	270	.09%	Yes
671 - 679	1	176	218	.4 %	Yes
731 - 736	2	132	260	.32%	Yes
743	1	28	319	.07%	Yes
751	1	100	116	.25%	Yes
804 - 806	1	200	117	.49%	Yes
861 - 863	3	503	11	1.24%	Yes
901 - 908	3	666	21	1.65%	Yes

TABLE 13

<u>CODE SECTION OR AREA</u>	<u>NUMBER OF TIMES CITED BY PANEL</u>	<u>NUMBER OF PARAGRAPHS</u>	<u>COMPLEXITY RANKING</u>	<u>COMPLEXITY WGT UNDER MEASUREMENT MODEL</u>	<u>C/G/L COMPLEXITY ATTRIBUTABLE TO THESE SECTIONS</u>
913	1	199	50	.49%	No
951 - 964	7	1763	13	4.36%	Yes
993	1	428	12	1.1 %	Yes
999	1	78	147	.19%	No
1231	2	61	188	.15%	Yes
1232	1	196	52	.48%	Yes
1234	1	59	194	.15%	Yes
1245	2	194	53	.48%	Yes
1248	2	286	22	.71%	Yes
1250	2	435	10	1.08%	Yes
1311 - 1314	3	169	188	.42%	Yes
1373	1	29	316	.07%	Yes
1501 - 1502	<u>4</u>	<u>760</u>	3	<u>1.9 %</u>	Yes
	<u>89</u>	<u>16,173</u>		<u>39.91%</u>	



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